GREENSVILLE COUNTY PLANNING COMMISSION

AGENDA

Tuesday, August 28, 2018

6:00 p.m.

- I. CALL TO ORDER
- II. ROLL CALL
- III. APPROVAL OF AGENDA
 - A. Approval of Minutes See Attachment A.
 - 1. June 12, 2018

IV. PUBLIC HEARING

- A. ZTA-1-18 Lisa M. Crickenberger See Attachment B.
- B. SP-7-18- Lisa M. Crickenberger See Attachment C.
- C. ZTA-2-18 Little Shiloh Baptist Church See Attachment \underline{D} .
- D. ZTA-3-18 Greensville County Board of Zoning Appeals
 Staff recommended deferral of this item until October 9, 2018 meeting.
- E. SP-6-18 Greensville County Solar Project (Tradewind Energy) See Attachment \underline{E} .

V. REGULAR SESSION

- A. ZTA-1-18 Lisa M. Crickenberger
- B. SP-7-18– Lisa M. Crickenberger
- C. ZTA-2-18 Little Shiloh Baptist Church
- D. ZTA-3-18 Greensville County Board of Zoning Appeals
- E. SP-6-18 Greensville County Solar Project (Tradewind Energy)

VI. OTHER MATTERS

- A. Greensville County Planning and Zoning Fees Revision See Attachment \underline{F} .
- B. Zoning Ordinance Updates # 14 and #15 See Attachment <u>G.</u> (Informational purposes) (No action required)

VII. ADJOURN

The Greensville County Planning Commission meeting was held Tuesday, June 12, 2018, 7:30 P.M., at the Greensville County Government Building, 1781 Greensville County Circle, Emporia, Virginia.

PRESENT

Len Hobbs, Chairman Walter Robinson, Vice-Chairman Lofton Allen Cornell Hines Jeff Robinson

ABSENT

Joe Antorn, Jr. Annie Odom Dianne Barnes-Rhoades Linwood E. Pope, Jr. Peggy Wiley

STAFF PRESENT

Russell Slayton, County Attorney Katherine Howerton Treva Pernell

OTHERS PRESENT

Greg Supey Lindsey Vincent Veronica Lewis Timothy Allen Shirley Taylor

Chairman Hobbs called the meeting of Tuesday, June 12, 2018 to order. Mr. Hobbs stated that the Commission would start the meeting with prayer. He stated that all present were invited to participate but no one was obligated to take part. He also stated that whether those present participated or not, it would have no effect on the consideration of any item on this evening's agenda. He called on Commissioner Jeff Robinson to offer prayer. The secretary called the roll.

In Re: APPROVAL OF THE AGENDA

Chairman Hobbs stated that a motion for an amendment to the Agenda was needed before approval of the Agenda.

Mr. Russell Slayton, County Attorney, stated that there was an oversight when preparing the Agenda. He stated that this amendment would correct that by adding the solar application to the Agenda. He also stated that he moved that the Agenda be amended by adding the 2232-1-18 Greensville County Solar Project (Tradewind Energy, LLC) application to the Agenda. He

recommended the adoption of that motion. Chairman Hobbs stated that a motion was made to amend the Agenda to include Tradewind Energy which was deferred from the May 8, 2018 meeting. Seconded by Commissioner Walter Robinson, with all voting aye, to approve the agenda as amended.

In Re: APPROVAL OF THE MINUTES

Commissioner Jeff Robinson stated that there was a correction needed. He stated that on page 7 under Presentation of Applicant, Fountain Creek should be changed to Fountain Creek Road. Commissioner Walter Robinson moved to approve the minutes of May 8, 2018 with the correction as described. Commissioner Hines seconded, with all voting aye, to approve the minutes as amended.

Chairman Hobbs entertained a motion to go into Public Hearing. Commissioner Hines made the motion, seconded by Commissioner Walter Robinson, with all voting aye, to go into Public Hearing.

In Re: PUBLIC HEARING

SP-1-18 Atlantic Coast Pipeline - Temporary Satellite Yard

Katherine Howerton greeted the Commission. She stated that the first case was SP-1-18 Atlantic Coast Pipeline (ACP), Tax Map 44-38, approximately 133.79 acres. She also stated that it is at the intersection of Moores Ferry Road and Skippers Road, a Hub-C and A-1, Agricultural zone.

Mrs. Howerton stated that ACP has requested to establish a temporary satellite yard for material and equipment storage. She stated that the proposed use would not be detrimental to the community and the use would be in conformity with the Comprehensive Plan.

Mrs. Howerton stated that access to the satellite yard would be located at the Moores Ferry Road and Skippers Road intersection. She stated that the applicant estimated that the proposed use would generate an additional 60 truck trips per day; dump trucks and pick-ups.

Mrs. Howerton stated that noise associated with the proposed facility would be movement of materials loading and unloading and traffic entering and exiting the site would produce noise. She stated that lights associated with the yard would be mounted around the facility perimeter and would be aimed downward to illuminate working areas. She also stated that Staff feels that the lights would not be noticeable to surrounding properties.

Mrs. Howerton stated that reviews of this application have been conducted by the Greensville County Building Department, Virginia Department of Health and the Virginia Department of Transportation.

Mrs. Howerton stated that a representative for ACP was in attendance to answer any questions that the Commission had.

Chairman Hobbs asked if the representative for ACP would like to address the Commission. Mr. Greg Supey, Project Engineer with Dominion Energy came forward to answer questions.

Chairman Hobbs asked the size of the gravel path where equipment would be stored. Mr. Supey stated that it was approximately 11 acres.

Commissioner Jeff Robinson asked how long would the storage yard be in place. Mr. Supey replied that the lease would be for two years. He stated that the bulk of the activity would be from April 2019 through October 2019.

Chairman Hobbs asked if there would be any storm water runoff for a project this size. Mr. Supey replied that there are plans under review with DEQ.

Commissioner Walter Robinson asked if ACP was comfortable with the nine conditions set forth in the permit staff recommendations. Mr. Supey replied that they were satisfied with the conditions.

Mr. Supey stated that he had a question concerning the lighting at the entrance. Commissioner Jeff Robinson stated that would be a question for the Building Department Staff.

Commissioner Robinson asked what would happen with the property when the temporary satellite yard is no longer in use. Mr. Supey stated that it will be restored to an agricultural field as it is now.

Mr. Lindsey Vincent addressed the Commission asking where the entrance would be for this temporary satellite yard. Commissioner Jeff Robinson stated that there would be two entrances; one off Skippers Road and one off Moores Ferry Road.

Veronica Lewis addressed the Commission asking what impact this temporary satellite yard would have on any timber removal her family would have done and subsequent building on their property. Commissioner Jeff Robinson suggested she contact the County Planning Department with her plans.

SP-4-18 – Timothy Allen

Mrs. Howerton stated that SP-4-18 Timothy L. Allen, Tax Map 44-20C, approximately 4.57 acres. She stated that it is located on the North side of Moores Ferry Road adjacent to I-95 South and in an A-1, Agricultural zone.

Mrs. Howerton stated that Mr. Allen has requested an Automobile/Truck repair shop within an enclosed garage. She stated that Staff recommended the approval of the applicant's request subject to the conditions outlined in the Staff Report.

Mrs. Howerton stated that the proposed use is an allowable use as indicated by the Zoning Ordinance. She stated that Staff finds that the proposed use is consistent with the overall objectives and intent of the Comprehensive Plan. She stated that Staff recommends the approval with the 11 conditions as set forth in the Staff Report. She also stated that Mr. Allen was at the meeting if the Commission has any questions.

Mr. Timothy L. Allen addressed the Commission. Chairman Hobbs asked Mr. Allen what type of vehicles would be repaired at this shop. Mr. Allen replied that he would be repairing cars, pick-up trucks, tractors, small engine repairs; lawn mowers, rototillers, etc. He stated that he is ASC Certified and has been for 23 years.

Chairman Hobbs asked if he was in agreement with the 11 conditions. Mr. Allen replied that he was in agreement.

Commissioner Allen asked where vehicles would be stored overnight. Mr. Allen stated that any vehicle not repairable in a day would be housed inside the shop.

Chairman Hobbs stated that he had concerns about Condition 8. "No outside storage of parts, supplies, or customer's vehicles is permitted". Mr. Allen stated that he had concerns about this condition and that it was not included in the conversation he had with Mr. Pope before his accident. He stated that he found out about this condition when he received his letter with the Staff Report a few days ago.

The Commission members discussed with Mr. Slayton changing the wording of Condition 8. Mr. Slayton stated that he would make the appropriate changes to the wording.

Mrs. Shirley Taylor addressed the Commission. She was confused about the address of the proposed garage. Mr. Allen answered her question that the address is 1007 Moores Ferry Road; shop is behind his home. Mrs. Taylor was satisfied with this answer.

2232-1-18 Tradewind Energy/Greensville County Solar Project, LLC

Chairman Hobbs stated that, at the May 8, 2018 meeting, 2232-1-18 application was deferred until the June 12, 2018 meeting giving the Commission time to ask questions and they were satisfactorily answered by the applicant. He stated that tonight was the time to vote on the 2232-1-18 review to approve, deny or defer the request.

Chairman Hobbs entertained a motion to go into regular session. Commissioner Walter Robinson made the motion, seconded by Commissioner Hines, with all voting aye, to go into Regular Session.

In Re: REGULAR SESSION

A. SP-1-18 - Atlantic Coast Pipeline Temporary Satellite Yard

Commissioner Walter Robinson made a motion that the application for SP-1-18 Atlantic Coast Pipeline, temporary satellite yard, be approved with the nine conditions as outlined in the Staff Report and forward recommendation to the Board of Supervisors, seconded by Commissioner Jeff Robinson, with all voting aye, motion carried.

B. SP-4-18 – Timothy L. Allen

Mr. Russell Slayton, County Attorney, conferred with Lin Pope via telephone. Mr. Slayton stated that Mr. Pope recommended that vehicles stored outdoors be screened so they would be in compliance with the abandoned vehicle ordinance.

Chairman Hobbs entertained a motion for SP-4-18 – Timothy Allen application with 11 conditions as outlined in the Staff Report and forward recommendation to the Board of Supervisors, motion made by Commissioner Hines to approve SP-4-18 with revised condition #8, seconded by Commissioner Walter Robinson, with all voting aye with exception of Commissioner Jeff Robinson who abstained due to helping applicant with this project, motion carried.

C. 2232-1-18 Tradewind Energy/Greensville County Solar Project

Chairman Hobbs stated that he had visited this property several times. He stated that there are only three or four houses involved and they are located on the property of the owners who are participating in the solar farm.

Commissioner Walter Robinson moved that 2232-1-18 Tradewind Energy/Greensville County Solar Project be approved and forward recommendation to the Board of Supervisors. He stated that it is in accord with the Greensville County Comprehensive Plan. Second made by Commissioner Jeff Robinson, with all voting aye, motion carried.

In Re: OTHER MATTERS

Chairman Hobbs stated that a copy of Resolution #18-125 approved by the Board of Supervisors was included in the Planning Commission agenda packet for informational purposes only.

In Re: ADJOURN

Chairman Hobbs entertained a motion to adjourn.

Commissioner Hines made the motion to adjourn, seconded by Commissioner Walter Robinson, with all voting aye, motion carried.

Len	Hobbs,	Chairman		

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COUNTY OF GREENSVILLE

TO:

Greensville County Planning Commission

FROM:

Katherine Howerton, Program Administrator

SUBJECT:

ZTA-1-18 – Lisa M. Crickenberger

Date:

July 31, 2018

The proposed additions to the Zoning Ordinance are necessary due to the interest of a new business within Greensville County.

The applicant Lisa M. Crickenberger desires to amend Article 4: PERMITTED USES IN PRIMARY ZONING DISTRICTS, Table 4.1 Permitted Use Table to include the following use:

Pet shop/dog parlor

The purpose of this Article is to establish permitted uses in primary zoning districts. To accomplish this purpose, Table 4.1 Permitted Use Table is hereby created as part of this Article, and likewise as part of the Zoning Ordinance of Greensville County. The "Permitted Use Table" establishes the uses of land, buildings, or structures that are permitted in Greensville County under this Ordinance, and stipulates the zoning district, or districts, in which each use is permitted.

RETAIL COMMERCIAL & SERVICES

A-1

U

B-1

R

B-2

R

The applicant also desires to amend Article 23: DEFINITIONS to include the following:

 23-2-98.1a Pet Shop/dog beauty parlor, provided that any work rooms, cages, pens or kennels be maintained within a completely enclosed, soundproof building and that such shop or parlor be operated in such a way as to produce no objectionable noise or odors outside its walls.

The proposed changes to the Permitted Use Table (Table 4.1) will allow the establishment of a Pet Shop/Dog Parlor project only with the issuance of a Special Use Permit approved by the Board of Supervisors in an A-1. Agricultural District. The proposed pet shop/dog parlor will be allowed in the B-1, Retail Business District and the B-2. General Commercial District by right.

The proposed definition was taken from Southampton County's Zoning Ordinance.

Special Use Permits may be granted by the Board of Supervisors for any of the uses for which a permit is required by the use regulations of the Zoning Ordinance. In granting any such special use permits, the Board of Supervisors may impose and such *conditions* in connection therewith as will assure that it will conform to the requirements of the zoning ordinance. A special use permit shall not be issued unless the Board of Supervisors shall find that:

- The proposal as submitted or as modified will not affect adversely the health, safety, or
 welfare of persons residing or working in the neighborhood of the proposed use; and
 will not be detrimental to public welfare or injurious to the property or neighborhood.
 Among matters to be considered in this connection are traffic congestions, noise, light,
 dust, odor, and vibrations, with regard to hours of operation, screening and other
 matters with might ne regulated to mitigate adverse impact.
- The proposal as submitted or modified will conform to the comprehensive plan, or to specific elements of such plan, and the official policies adopted in relation hereto, including the purposes and the expressed intent of this Ordinance.

The proposed amendment has been found to be compatible with the Goals and Objectives of the Greensville County Comprehensive Plan as well as the County Zoning Ordinance. Therefore, Staff recommends approval of the applicant's request to amend Article 4, Table 4.1 and add definition 23-2-98.1a, as indicated above.

Should you have any questions or concerns, do not hesitate to contact me at (434) 348-4232 or by email at khowerton@greensvillecountyva.gov.

Katherine Howerton, Program Administrator

STAFF REPORT

SP-7-18

OVERVIEW

APPLICANT Lisa M. Crickenberger

OWNER James T. Woodruff & Tony M. Clements

TAX MAP 26-29D

ACREAGE 6.48 acres

LOCATION 255' west of Allen Town Rd.(St. Rt.667) and

Dry Bread Rd (St. Rt. 611 intersection

ELECTION DISTRICT 002, Hicksford

EXISTING ZONING A-1

EXISTING USE Agricultural/Residential

REQUEST Establish a pet shop/dog parlor business

ADJACENT ZONING A-1, Agricultural

PREVIOUS ZONING ACTIVITY None

CHARACTER OF AREA Agricultural and Residential

NATURAL CONDITIONS Elevation 190'+/-

GREENSVILLE COUNTY Agricultural, Rural Residential

COMPREHENSIVE PLAN (THE PLAN)

DIRECTOR'S COMMENTS

The applicant, Lisa Crickenberger has applied for a Special Use Permit in order to establish a pet shop/dog parlor business on property owned by Tony Clements and James Woodruff located at 239 Allen Town Road, Emporia, VA 23847. The subject property is zoned A-1 Agricultural and per Article 4 of the County Zoning Ordinance, a Special Use Permit is required in order to establish a pet shop/dog parlor.

The Zoning Ordinance defines the A-1 Agricultural Zone as a district that covers the largest portion of the County, which is presently occupied by farms, forests, conservation areas and other types of rural uses. It is designed to protect these existing conditions and to encourage only that future development which promotes the preservation of the rural qualities of the County. In addition, selected business and industrial uses may be permitted ibn the district but only when the governing body finds that such development not only enables the rural characteristics of the County to be maintained but is in harmony with the economic development objectives of the County. It is also an intent of this district to provide for low-density rural housing which is arranged: to minimize impact upon agricultural activities; to maximize open space which may be used for agriculture and forestry; and to be compatible with the rural qualities of the County.

Special Use Permits may be granted by the County for any of the uses for which a permit is required by the use regulations of this Ordinance. In granting any such special use permits, the County may impose any such condition in connection therewith as will insure that it will conform to the requirements contained herein and will continue to do so. A special use permit shall not be issued unless the Board of Supervisors find that:

- The proposed use would not be detrimental to the community. The application as submitted will not affect adversely the health, safety, or welfare of persons residing or working in the neighborhood of the proposed use; and will not be detrimental to the public welfare or injurious to the property of improvement in the neighborhood. Among matters to be considered in this connection are traffic, congestion, noise, lights, dust, odor, fumes, and vibrations.
- The proposed use shall be in conformity with the Comprehensive Plan and Policies.

Access to the proposed business will be a road, which is located approximately 255' west of Allen Town Rd.(St. Rt. 667) and Dry Bread Rd (St. Rt. 611) intersection. There will be little change in traffic volume on Route 667 due to the proposed use. The applicant estimated that the proposed use would generate an additional 6-8 vehicle per day.

Noise associated with the proposed business will be vehicles dropping off and picking up animals.

Lights associated with the business will be minimal as hours of operation are during daylight hours.

Small amounts of dust may be generated when vehicles enter and exit the site as a rock driveway is utilized.

Fumes and odor will not be evident..

Vibrations will not be of concern to surrounding properties.

When we turn to the County's Comprehensive Plan this area is characterized by low-density residential development such as detached single-family units on lots larger than urban or suburban lots. Certain agricultural and farming uses are typically allowed.

If approved, the character of the area will not be negatively impacted upon by the establishment of this use, as this request is appropriate given the character of the area. Conditions have been imposed that will eliminate any possible nuisances created by the business.

The Greensville County Building Department, the Virginia Department of Health, and the Virginia Department of Transportation have conducted reviews of this application; their notations are incorporated into the conditions. The staff recommends approval with conditions.

STAFF RECOMMENDATION

APPROVE WITH CONDITIONS

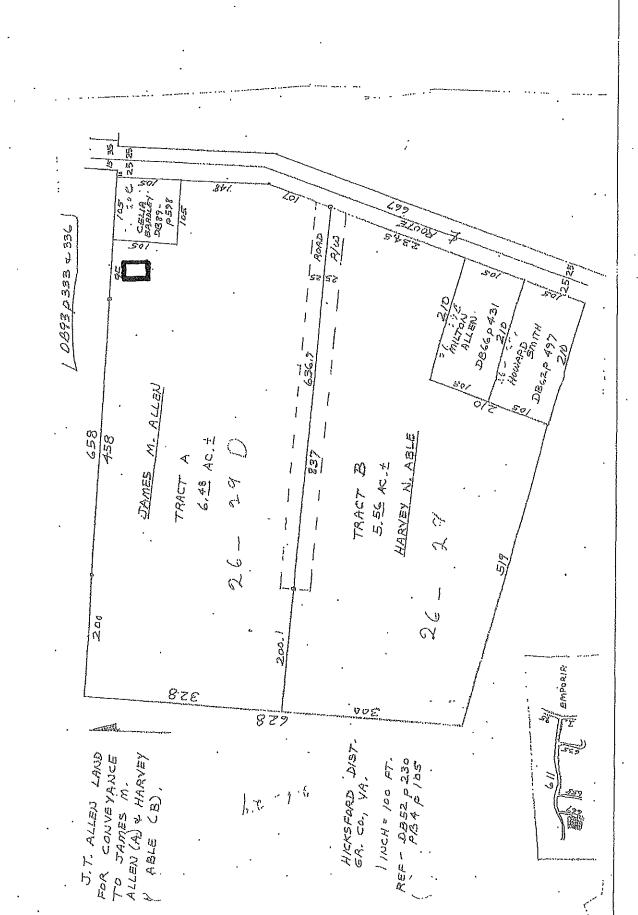
- 1. Special Use Permit is granted to Lisa M. Crickenberger for the establishment of a pet shop/dog parlor on property located on Greensville County Tax Map 26, Parcel 29D.
- 2. Applicant shall develop and maintain the property in accordance with all applicable local, state, and federal rules, regulations, ordinances, and laws.
- 3. Upon evaluation of an engineer, obtain a Building Permit for the existing structure in order to comply with any local and state codes in regards to "Business Occupancy".
- 4. Submit to any inspections or structural requirements necessary to convert the storage building into a retail/commercial business.
- 5. Employees shall be limited to the present applicant and one (1) full time employee.
- 6. Applicant shall provide the County with copies of all local and state permits.
- 7. Operation of the business shall be as the applicant stated in the application; 9:00 a.m. to 5:00 p.m.
- 8. No outside storage of animals or supplies is permitted.

- 9. Adhere to all requirements of the Greensville/Emporia Health Department.
- 10. Signage is subject to Article 15-3-2 (e). The locations of the sign is subject to VDOT approval.
- 11. Utilizing this permit issuance date as the annual date, if the proposed use is not established within two (2) years, or is abandoned for two (2) consecutive years, this permit will be automatically terminated.

12. Failure to abide by the above condition may result in the revocation of this Special Use Permit.

Katherine H. Howerton Planning Administrator

Date: July 31, 2018







SPECIAL USE PERMIT

•	or Donar Obert Mayiri
Owner	FILE#: 5P-7-18
Name: Lisa M. Cricker Physical Address: 31443 Little Branchville, Va 23 Mailing Address: 31443 Little	Teras Rol Branchville Va 23828
Telephone: (434) (437-2473	or (252) 387-9005
Tax Map/Parcel Number(s)	Acreage(s) Election District(s)
1. 26-29 D 2.	/ 6.48 / 2
	Hen Town Road Emporiala 23847
Current Zoning/Proffers	Existing Use Proposed Use
1. N/A 2.	Residential (Vaccint) Dog Beauty Parlor / Shop
SCHEMATIC DRAWING OF THE	PLAT OF PROPERTY WHICH INCLUDES A PROPOSAL SHOWING BUILDING HEIGHT AND), STORAGE AREA(S), UTILITIES, ETC.
Detail Description of Request (Address Open a pet grooming st	impact of proposal on check list items):
Justification: Residents of the Canty and State for the I can provide these sente Greensville county and	canty anetraveling olutside of the se services, when if approved us Keeping this business in promoting economic Growth.
The foregoing information is complete ar representatives of Greensville County me permission to do so is hereby given.	and correct to the best of my knowledge. I acknowledge that ay inspect the property subject to this application and my



GREENSVILLE COUNTY SPECIAL USE PERMIT . CHECK LIST

HEALTH, SAFETY, AND WELFARE:

The state of the s
Traffic: Slight Increase in traffic, 6-8 more vehicles per business day.
Noise: No objectionable noise is expected.
Lights: No exterior lighting of this time.
Dust: None expected
Fumes: None expected
Vibrations: None expected outside of building
Operations (Outside storage of materials, screening): All materials are Stored Within the buildings walls.
Hours of Operation: 9 am to 5pm (3 days a week)
Number of Employees: One (Self)
Type of Equipment: tub, Clippers, Scissors, brushes, nail trimer etc.
Signage: Per Article 15-3-2 (e) 1 freestanding sign
COMPREHENSIVE PLAN (Compatibility):

Lisa M. Crickenberger permission to use my property at 239 Allen Town Rd Emporia Va 23847 for her dog graming shop/dog beauty parlor.

Signed Cans T. lundiff.

Lisa M. Crickenberger permission
to use my drive way at 205 Allentown
Rd Emporia Va 23847; adjacent to
239 Allen Town Rd, Emporia Va 23847,
for her dag grooming shop access
and parking.

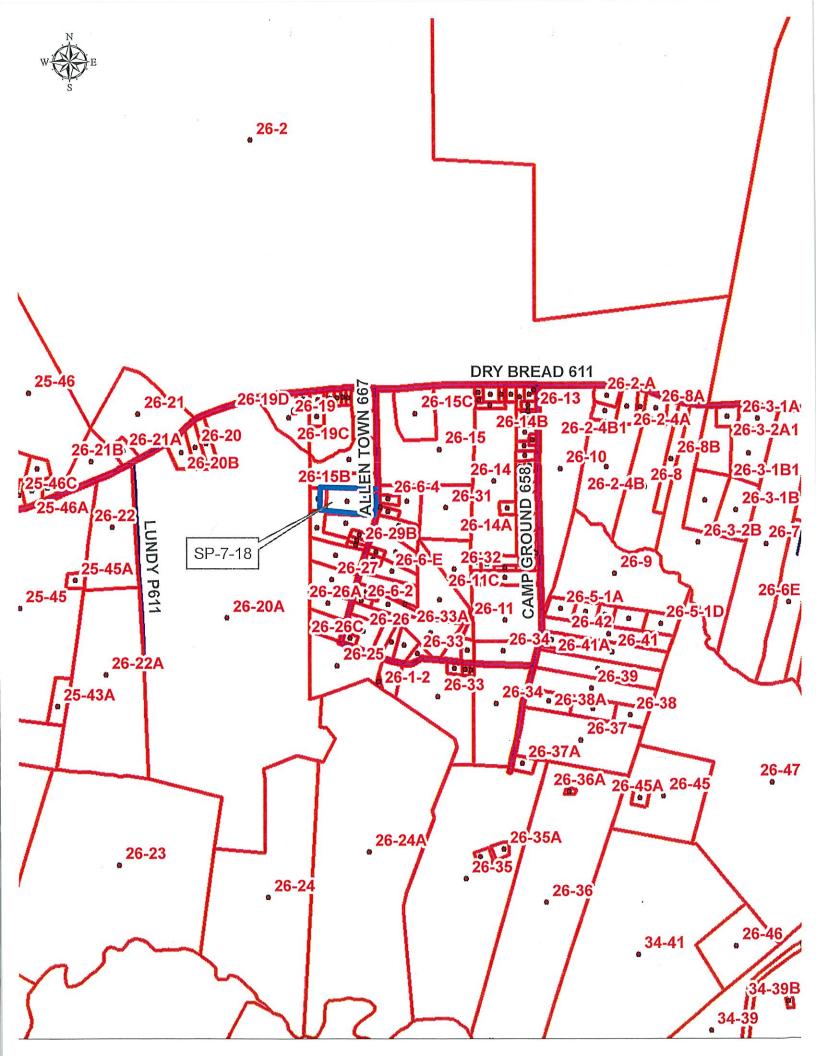
Signed: Frankie Earl Dean allen

7/13/18

Teny Chements give Lisa M. Crickenberger permission to use my property at 239 Allen Town Road Emporia Va 23847, for her dog beauty parlor; dog grooming shop.

Signed: Jony M Camas





SP-7-18 Lisa M. Crickenberger ADJACENT PROPERTY OWNERS

Tax Map #	Land owner
26-29E	CAIN ROBERT E
	3294 DRY BREAD RD
	EMPORIA VA 23847
26-15A	ALLEN FRANKIE EARLDEAN-LIFE EST
-	AT DEATH- TONY M CLEMENTS
*****	205 ALLEN TOWN RD
	EMPORIA VA 23847
26-29C	WOODRUFF JAMES T &
	TONY M CLEMENTS
	501 ALLEN TOWN RD
	EMPORIA VA 23847
26-29F	BLACKSHEAR CHRISTINE C- LIFE ESTATE
	AT DEATH- ROBERT E CAIN
	3294 DRY BREAD RD
	EMPORIA VA 23847
26-6-4	PHILLIPS LORAINE G- LF EST AT DTH-
	RAYMOND A OR PAMELA P THOMAS
	258 ALLEN TOWN RD
	EMPORIA VA 23847
26-6-1	WILLIAMS BRENDA BRASWELL
	P O BOX 186
	WENDELL NC 27591
26-6-A	NEWBY MARILYN C
	17899 LOVING UNION RD
	DISPUTANTA VA 23842
26-6-C	CARPENTER RODNEY T
-	C/O RHONDA CARPENTER
The second secon	3275 NOGALES PLACE
	REX GA 30273

COUNTY OF GREENSVILLE

TO:

Greensville County Planning Commission

FROM:

Katherine Howerton, Program Administrator

SUBJECT:

ZTA-2-18 – Little Shiloh Baptist Church

Date:

August 7, 2018

The applicant, Little Shiloh Baptist Church, desires to amend Article 15-4-6 of the Greensville County Zoning Ordinance to allow for the installation of Electronic Message boards.

Article 15-4-6 of the Greensville County Zoning Ordinance states that "Any sign that displays flashing or intermittent lights, or other lights of changing degrees of intensity, brightness or color, except a sign indicating time or temperature, with changes alternating on not less than a five-second cycle."

Article 15-4-6 was adopted more than 25 years ago and prior to the invention of the Electronic Message Boards that are available today .As written, Article 15-4-6 of the Zoning Ordinance does not allow any form of electronic signs with the exception of signs that only indicate the time or temperature. Therefore staff feels that this is a good time to address the request by the Little Shiloh Baptist Church and amend the Zoning Ordinance as it relates to modern electronic message boards.

Staffs' research indicates that there are four types of Electronic Message Display Boards available on the market today. These message boards are categorized as follows:

- A. Static Display (Message changed with no transition),
- B. Static Display (Fade/Dissolve transition),
- C. Static Display (Travel/Scroll Transitions and Animations), and
- D. Video/Animation Message Boards

Staff recognizes the fact that the location of electronic message board could cause potential nuisances to surrounding properties and could cause distractions to motorist traveling throughout Greensville County. To address these potential nuisances and conflicts, staff feels that the installations of these electronic message boards should only be allowed through the issuance of a Special Use Permit by the Greensville County Board of Supervisors. As with all Special Use Permits this will afford the Virginia Department of Transportation a chance to review all applications for the installation of Electronic Message Boards and offer their comments to the County Staff.

Staff recommends deleting Article 15-4-6 and adding a new Article, Article 15-4A to the Greensville County Zoning Ordinance to address Electronic Message Boards:

15-4A SIGN REGULATIONS FOR ELECTONIC SIGNS

15-4A-1 STATIC DISPLAY (Message Changed with no Transition)

A. Definitions:

ELECTRONIC MESSAGE DISPLAY – A sign capable of displaying words, symbols, figures or images that can be electronically or mechanically changed by remote or automatic means.

B. Permitted Locations:

Electronic Message Displays may be permitted with the approval of a special use permit in the A-1, Agricultural, M-1 Industrial, B-1 Business & B-2 Business Zoning Districts subject to the following requirements:

C. Operational Limitations:

Such displays shall contain static messages only, and shall not have movement, or the appearance or optical illusion of movement, of any part of the sign structure, design, or pictorial segment of the sign, including the movement or appearance of movement of any illumination or the flashing, scintillating or varying of light intensity.

D. Minimum Display Time:

Each message on the sign must be displayed for a minimum of 15 seconds.

E. Message Change Sequence:

The change of messages must be accomplished immediately.

F. Permitted Size and Location of Signs:

The location and size of electronic message displays must conform to Article 15-3-2 and Article 15-3-3 of the Greensville County Zoning Ordinance.

15-4A-2 STATIC DISPLAY (Fade/Dissolve Transitions)

A. Definitions:

ELECTRONIC MESSAGE DISPLAY – A sign capable of displaying words, symbols, figures or images that can be electronically or mechanically changed by remote or automatic means.

DISSOLVE – a mode of message transition on an Electronic Message Display accomplished by varying the light intensity or pattern, where the first message gradually appears to dissipate and lose legibility simultaneously with the gradual appearance and legibility of the second message.

FADE – a mode of message transition on an Electronic Message Display accomplished by varying the light intensity, where the first message gradually reduces intensity to the point of not being legible and the subsequent message gradually increases intensity to the point of legibility.

FRAME – a complete, static display screen on an Electronic Message Display.

FRAME EFFECT – a visual effect on an Electronic Message Display applied to a single frame to attract the attention of viewers.

TRANSITION - a visual effect used on an Electronic Message Display to change from one message to another.

B. Permitted Locations:

Electronic Message Displays may be permitted with the approval of a special use permit in the A-1, Agricultural, M-1 Industrial, B-1 Business & B-2 Business Zoning Districts subject to the following requirements:

C. Operational Limitations:

Such displays shall contain static messages only, changed only through dissolve or fade transitions, or with the use of other subtle transitions and frame effects that do not have the appearance of moving text or images, but which may otherwise not have movement, or the appearance or optical illusion of movement, of any part of the sign structure, design, or pictorial segment of the sign, including the movement of any illumination or the flashing, scintillating or varying of light intensity.

D. Minimum Display Time:

Each message on the sign must be displayed for a minimum of 15 seconds.

E. Permitted Size and Location of Signs:

The location and size of electronic message displays must conform to Article 15-3-2 and Article 15-3-3 of the Greensville County Zoning Ordinance.

15-4A-3 STATIC DISPLAY (Travel/Scroll Transitions and Animations)

A. Definitions:

ELECTRONIC MESSAGE DISPLAY – A sign capable of displaying words, symbols, figures or images that can be electronically or mechanically changed by remote or automatic means.

DISSOLVE – a mode of message transition on an Electronic Message Display accomplished by varying the light intensity or pattern, where the first message gradually appears to dissipate and lose legibility simultaneously with the gradual appearance and legibility of the second message.

FADE – a mode of message transition on an Electronic Message Display accomplished by varying the light intensity, where the first message gradually reduces intensity to the point of not being legible and the subsequent message gradually increases intensity to the point of legibility.

FRAME – a complete, static display screen on an Electronic Message Display.

FRAME EFFECT – a visual effect on an Electronic Message Display applied to a single frame to attract the attention of viewers.

SCROLL – a mode of message transition on an Electronic Message Display where the message appears to move vertically across the display surface.

TRANSITION – a visual effect used on an Electronic Message Display to change from one message to another.

TRAVEL – a mode of message transition on an Electronic Message Display where the message appears to move horizontally across the display surface.

B. Permitted Locations:

Electronic Message Displays may be permitted with the approval of a special use permit in the A-1, Agricultural, M-1 Industrial, B-1 Business & B-2 Business zoning districts subject to the following requirements:

C. Operational Limitations:

Such displays shall be limited to static displays, messages that appear or disappear from the display through dissolve, fade, travel or scroll modes, or similar transitions and frame effects that have text, animated graphics or images that appear to move or change in size, or be revealed sequentially rather than all at once.

D. Minimum Display Time:

Each message on the sign must be displayed for a minimum of 15 seconds.

E. Permitted Size and Location of Signs:

The location and size of electronic message displays must conform to Article 15-3-2 and Article 15-3-3 of the Greensville County Zoning Ordinance.

15-4A-4 VIDEO/ANIMATION ELECTRONIC MESSAGE DISPLAY

a. Definitions:

VIDEO/ANIMATION ELECTRONIC MESSAGE DISPLAY – A sign capable of displaying words, symbols, figures or images that can be electronically or mechanically changed by remote or automatic means, including animated graphics and video.

b. Permitted Locations: Video/Animation Electronic Message Displays are not allowed within any zoning district.

Should you have any questions or concerns, do not hesitate to contact me at (434) 348-4232 or by email at lpope@greensvillecountyva.gov.

Staff Report Greensville County Solar Project Special Use Permit SP-6-18

Greensville County, Virginia

Report Date: August 20, 2018
Planning Commission Meeting Date: August 28, 2018

APPLICATION SUMMARY

Project: Location: Greensville County Solar Project (Tradewind Energy Project) Located approximately two miles southwest of Emporia, west

of I-95

Parcel Record Numbers:

34-35, 34-36, 35-13, 35-14, 35-20, 35-21, 35-22, 35-24, 35-25,

35-30, 35-31

Proposal:

Applicant's request for a Special Use Permit for a 80 megawatt

(MW) solar energy facility in the A-1 Zoning District

Application Submitted:

June 12, 2018

Applicant:

Greensville County Solar Project, LLC

16105 West 113th Street, Suite 105

Lenexa, Kansas 66219 Contact: Matt Gilhousen

Representative:

Justin McGeeney, Greensville County Solar Project, LLC

Owners:

See Property Owner Contact Information in Attachment A

Exhibit I in the SUP Application

PLANNING COMMISSION ROLE

The Applicant has submitted a Special Use Permit (SUP) application for a solar energy facility The Planning Commission previously reviewed the applicant's proposal as a "public utility facility" under Virginia Code Section 15.2-2232(A), and determined that the general or approximate location, character, and extent of the proposed facility is substantially in accord with the County's Comprehensive Plan. The Planning Commission must now evaluate the merits of the SUP and determine if the proposed conditions sufficiently mitigate any associated impacts from the project and meet the County's conditional planned use development criteria as set forth in the Zoning Ordinance. The Planning Commission is requested to make a recommendation to the Board of Supervisors to approve or deny the SUP Application. The Planning Commission may also defer action to a future meeting.

PROPOSED DEVELOPMENT

The Applicant proposes to construct a 80 megawatt (alternating current) photovoltaic solar energy generation facility on 12 parcels consisting of a total of 1,099 acres with approximately 800 acres developed as part of the solar facility. The design employs predominantly single-axis tracking technology, meaning it will use solar panels mounted on a framework that tracks the movement of the sun during the day. Visually, the project will appear as long rows of solar panels mounted on posts and horizontal supports. The solar facility will have no air emissions or sound audible outside the fenced portions of the project. Other project development details are set forth in the SUP application along with the site plan (Attachment A).

EXISTING CONDITIONS AND ZONING

The application property consists of a mixture crop land and forest land with the land historically used for agricultural and forestry purposes. The application property is currently zoned A-1, agricultural zoning district.

ADJACENT AND SURROUNDING USES

The application property is bordered by existing agricultural land consisting of a mixture of cleared land and existing timber land, as well as a number of single-family residential properties. Portions of the project are adjacent to I-95.

The application property is located in an agriculturally zoned area (A-1) and is not proximate to any scenic byways, or known historic resources.

COMPREHENSIVE PLAN CITATIONS

Below are the relevant excerpts of Greensville County's Comprehensive Plan.

Goals and Objectives

GENERAL

- 1) Provide adequate governmental services, including public utilities, to meet the needs of Greensville's citizens.
- 2) Coordinate development with the provision for public utilities and services.
- 3) Preserve the rural character of the County by directing and controlling growth in designated areas.

LAND USE GENERAL

- 1) Encourage new development that complements surrounding uses.
- 2) Concentrate development in appropriate locations by encouraging more efficient site design and incorporating proper buffers between differing uses.

RESIDENTIAL

3) Prevent the encroachment of conflicting land uses on existing viable neighborhoods.

COMMERCIAL/INDUSTRIAL

5) Evaluate large scale industrial economic development projects that will provide an economic benefit to the County but that may not be in designated development areas or near major transportation systems.

PUBLIC FACILITIES

3) Plan accordingly for the future needs of the population.

Planning Issues & Strategies

LOCAL PRODUCTION OF RENEWABLE ENERGY

1) There is a great interest in the construction of Solar Energy Farms throughout the County as a result for the quest to generate environmental friendly energy.

STRATEGIES/POLICIES

- a. If not detrimental to the surrounding area, Solar Energy Projects greater than 20 MW_{AC} are encouraged in agricultural zoned districts.
- c. It is encouraged that a Decommissioning plan be provided by the owner of such Solar Energy Projects to ensure to proper dismantling of the project.

AGRICULTURAL AND FORESTAL LANDS ISSUES

1) There is concern to maintain the agricultural characteristics of the County not included in the Urban Services District.

STRATEGIES/POLICIES

a. Re-evaluate current development standards to ensure all areas that lie within the Rural Development Area, with the exception of Major Commercial Hub, maintain these agricultural and rural development qualities.

Future Land Use Map

The Comprehensive Plan describes Rural Residential; Conservation Area as follows:

Characterized by low-density residential development such as detached single-family units on lots larger than urban or suburban lots. Certain agricultural and farming uses are typically allowed. In addition, large scale economic development projects may be allowed subject to required land use approvals as approved by the Board of Supervisors.

ZONING ORDINANCE PROVISIONS

In November 2016, the County Board of Supervisors amended the Zoning Ordinance (Articles 4 and 23) to permit solar energy facilities (projects) by special use permit (Conditional Planned Use Development) in the A-1, B-1, B-2, and M-1 zoning districts. As set forth in the Zoning Ordinance:

A conditional planned use development provides for the planning commission to recommend, and the board of supervisors to authorize, specific uses not permitted within a specific zoning district, provided that the board of supervisors considers the following in making their determination:

- (a) That the uses permitted by such exception are necessary or desirable and are appropriate with respect to the primary purpose of the development.
- (b) That the uses permitted by such exception are not of such a nature or located so as to exercise a detrimental influence on the surrounding neighborhood.
- (c) If a use is not specifically enumerated in the zoning ordinance by-right, special exception, or special use in any district, then the planning commission may recommend and the board of supervisors may authorize such use. Nothing contained in this section shall be construed to permit the approval of any use specifically prohibited.

STAFF ANALYSIS

In the application materials dated June 12, 2018 (Attachment A), the Conditional Use Planned Development considerations cited above are addressed by the Applicant (with staff's comments in *italics*).

(a) That the uses permitted by such exception are necessary or desirable and are appropriate with respect to the primary purpose of the development.

Local production of renewable energy is identified in the Greensville Comprehensive Plan as a planning issue with a stated policy to encourage Solar Energy Projects greater than 20 MW_{AC} in agricultural zoned districts, if not detrimental to the surrounding area. This proposed Project would create local production of renewable energy in an agricultural zoning district that would not be detrimental to the surrounding area. See response to item (b) below and in responses to the consistency of the Project with the Comprehensive Plan in the Application Narrative for additional information on how the Project will fit with the neighborhood.

The Planning Commission must determine if the Solar Facility (the primary purpose of the development) is appropriate in the proposed location.

(b) That the uses permitted by such exception are not of such a nature or located so as to exercise a detrimental influence on the surrounding neighborhood.

Solar energy facilities have proven to be compatible with neighboring agricultural and rural uses as explained further in The Application Narrative. Meeting and exceeding zoning district setbacks at the Project boundary and natural and additional screening will ensure that the surrounding area is buffered from the Project. Generally, solar energy projects do not negatively impact neighbors with noise, odor or traffic issues that can be problematic with many other types of neighboring developments.

Solar energy facilities may be compatible with neighboring agricultural and rural uses if they are not located in proximity to, or within sight of, scenic routes or historic or recreational resources, and if they are appropriately screened from public rights-of-way and adjacent properties.

(c) If a use is not specifically enumerated in the zoning ordinance by-right, special exception, or special use in any district, then the planning commission may recommend and the board of supervisors may authorize such use. Nothing contained in this section shall be construed to permit the approval of any use specifically prohibited.

Not applicable. The Zoning Ordinance permits a Solar Energy Project greater than 20 MW_{AC} as a Special Use through a Conditional Use Planned Development approval in Agricultural zoned districts.

Staff agrees.

Section 4-4 of the Zoning Ordinance outlines the general conditions that apply to all special uses as listed below with Applicant responses following each (staff's comments are in *italics*).

(a) The use shall be designed or arranged on the land in such a way as to cause no more adverse impact on the adjacent property, and/or the neighborhood than might be caused by the least restrictive use otherwise permitted by right in the district.

The Project will adhere to setbacks and yard requirements at the Project boundary adjacent to non-participating property owners as any use in the A-1 Zoning District: Project solar panels will be setback a minimum of 100 feet from the centerline of adjacent roadways. In addition, Project solar panels will be setback a minimum of 50 feet from adjacent non-participating property lines. In most cases, Project solar panel setbacks will be in excess of 100 feet; and in some cases, setbacks will exceed 1,500 feet.

The Project site is currently buffered by forested areas and Interstate 95, however additional vegetative screening will be provided as needed along road right-of-ways. In order to preserve the buffer created by existing forested areas, TWE is working with Project landowners on a Timber Preservation Agreement in which the landowners commit to preserve (not harvest) a generally 50 foot wide area of timber along their property line.

Adequate project setbacks, buffers and screening are critical to ensuring this criterion is met.

(b) The use shall comply with all licensing requirements, if any, of any County, State or Federal government or agency.

The Project Company will comply with all governmental licensing requirements applicable to the Project at the County, state and federal level.

The proposed conditions ensure compliance with all County, state and federal governmental licensing requirements applicable to the Project.

(c) The use shall not be operated as to cause a nuisance to the neighborhood in which it is located.

The Project will not cause a nuisance to neighboring property owners or occupants. Additional details are provided below in response to specific Special Use considerations.

Adequate project setbacks, buffers and screening are critical to ensuring this criteria is met.

(d) In granting a special use, the Board of Supervisors shall consider the public convenience, necessity and general welfare and its action shall also be consistent with good zoning practices.

The Project will be consistent with maintaining the public welfare and upholding good zoning practices as it will meet or exceed the requirements of the Zoning Ordinance applicable to Solar Projects in the A-1 Zoning District.

The Planning Commission must determine if the Solar Facility will maintain the public welfare and be consistent with upholding good zoning practices if it meets or exceeds the requirements of the Zoning Ordinance applicable to Solar Projects in the A-1 Zoning District.

Zoning Ordinance, Article 16, states that a special use permit (SUP) shall not be issued unless the Board of Supervisors finds that the proposed use (1) would not be detrimental to the community and (2) is in conformity with the Comprehensive Plan and Policies. According to the Applicant, based on information provided in the SUP application, the proposed Project will not be detrimental to the community, rather it will beneficial; and the Project conforms to the County Comprehensive Plan and Policies. The Applicant addresses those findings below (staff comments in *italics*).

1. Project Would Not Be Detrimental to the Community

As required by the Greensville County SUP application, the Project Company evaluated the following considerations for the proposed Project:

Traffic: Construction of the proposed Project is estimated to take approximately six (6) to nine (9) months. The hours of construction activity, the level of traffic, and the number of employees on the Property during that period will vary by the type and phase of construction. Heavy construction work will occur during daylight hours. Once operational, the Project will be an unmanned facility maintained by small operations and maintenance crews (one to four people) that visit the site as necessary. The proposed Project will not impact long term traffic flow in the area and therefore will not strain the County's existing transportation infrastructure.

Noise: Solar energy facilities do not generate sound that is audible outside of the Project fenceline.

Lighting: The proposed Project will utilize PV solar panels, which are designed to absorb the sun's light to convert it into energy, rather than reflect it. PV solar panels use non-reflective glass and are generally less reflective than windows. The proposed Project does include accessory structures that require lighting. To the extent exterior lighting is necessary for Project facilities, such lighting will include only minimal, non-intrusive security lighting that will be motion-sensored and activated only when necessary and designed to face down and

away from any neighboring properties. Security lighting would be located near the secure entrance to the Project site.

Dust: The Project would not result in adverse impacts to air quality. Some particulate emissions from dust generation would result from the operation of heavy equipment during construction. However, these emissions would be temporary and limited to active areas of construction. Best Management Practices (BMPs) would be implemented during construction to mitigate dust emissions. Specifically, water trucks would be utilized to spray disturbed areas to minimize dust emissions.

Fumes: Large earth-moving equipment, skid loaders, trucks, and other mobile sources may be powered by diesel or gasoline and are sources of combustion emissions. Seasonal winds have the potential to move emissions outside of the Project area; however, emissions would be minimal and transient in nature during the period of construction (six to nine months) and would not significantly contribute to the ozone levels in Greensville County.

Vibrations: Vibration levels will not increase as a result of the proposed Project.

Operations (Outside storage of materials, screening): Project operations will not require outdoor storage of any materials. Therefore, this consideration does not apply. The Project site is buffered by natural screening of forested areas and Interstate-95, however, additional vegetative screening will be added as necessary along certain road right-of-ways as provided herein.

Hours of Operation: The proposed Project will operate during daylight hours only.

Number of Employees: The proposed Project will create approximately 300 temporary jobs during construction; and one (1) to four (4) permanent jobs during operations based on total employee hours spent at the facility. Once operational, the Project will be an unmanned facility.

Type of Equipment: In general, Project equipment and infrastructure will include a ground-mounted solar array that will utilize PV solar modules and single-axis tracking technology, inverter stations, substation, perimeter security fencing and the necessary interconnection facilities as specified by the local utility to connect the Project to the electrical grid.

Signage: Project signage will be limited to warning signs and will be in compliance with the County's Zoning Ordinance.

The Planning Commission must determine if the proposed conditions will ensure that the Applicant/Owner will adequately address these project details so that the Solar Facility will not constitute a detriment to the community during the proposed duration (>20 years) of the project.

2. Project is in Conformity with Comprehensive Plan and Policies

Greensville County Solar Project, LLC submitted a 15.2 2232 Review application for the proposed Project on April 10, 2018. The 15.2 2232 Review application included a review of the County's Comprehensive Plan and determined the proposed Project is consistent with and supportive of the Application's stated goals of the County's Comprehensive Plan.

The 15.2-2232 staff report included a review of the County's Comprehensive Plan goals and objectives, and the Planning Commission determined the proposed Project is substantially in accord with the County's Comprehensive Plan.

Project Benefits

A number of project benefits to the County are also asserted including job creation at the state and local level, revenue to the County and the State, economic benefits of the construction process, and increased property taxes. The application may be reviewed in full (Attachment A) for further details.

Primary Issues

As part of the 2232 review process, staff flagged three main issues that it wanted to see better addressed during the special use permit (SUP) process – buffers/screening, a grading plan, and a decommissioning plan with a cash escrow security. Another concern has been expressed by the community regarding property values.

Buffers – The SUP application proposes a minimum 50' wide area of timber along adjacent property lines that would not be timbered. These Timber Preservation Agreements would help to ensure a minimum 50' vegetative buffer around the site perimeter for the project's duration.

Grading Plan – In the 2232 process, County staff requested that a grading plan be submitted with the SUP application so that it can be properly evaluated as to site impacts.

All plans should be reviewed by a third party (County on-call engineer) prior to submission for review by the Virginia Department of Environmental Quality (VDEQ). Securities (cash escrow, letter of credit, insurance bond) should be posted for this work (grading, ESC, SWP) prior to any issuance of a land disturbance permit.

Decommissioning Plan — At this time, a decommissioning cost estimate has not been generated. County staff has made it clear that a cash escrow security for decommissioning is strongly preferred over any other form of security.

Property Values – Pearson's Appraisal Service, Inc., a local tax assessment firm, has been asked by the County to address a common concern expressed by adjacent and nearby property owners regarding the impact of a utility-scale solar facility on their property values. That opinion is expressed in Attachment B.

Conditions

If the Planning Commission determines that the application furthers the Comprehensive Plan's goals and objectives and that it meets the criteria set forth in the Zoning Ordinance, then staff recommends the following conditions to mitigate the adverse effects of this utility-scale solar generation facility with any recommendation for approval.

- 1. The Applicant will develop the Solar Facility in substantial accord with the Conceptual Site Plan dated May 3, 2018 included with the application as determined by the Zoning Administrator (ZA). Significant deviations or additions, including any enclosed building structures to the Preliminary Site Plan will require review and approval by the Planning Commission and Board of Supervisors.
- 2. Site Plan Requirements. In addition to all Virginia site plan requirements and site plan requirements of the Zoning Administrator, the Applicant shall provide the following plans for review and approval for the Solar Facility prior to the issuance of a building permit:
 - a. Construction Management Plan. The Applicant shall prepare a "Construction Management Plan" for each applicable site plan for the Solar Facility, and each plan shall address the following:
 - i. Traffic control methods (in coordination with the Virginia Department of Transportation [VDOT] prior to initiation of construction): i. Lane closures, ii. Signage, and iii. Flagging procedures.
 - ii. Site access planning. Directing employee and delivery traffic to minimize conflicts with local traffic.
 - iii. Fencing. The Applicant shall install temporary security fencing prior to the commencement of construction activities occurring on the Solar Facility project.
 - iv. Lighting. During construction of the Solar Facility, any temporary construction lighting shall be positioned downward, inward, and shielded to eliminate glare from all adjacent properties. Emergency and/or safety lighting shall be exempt from this construction lighting condition.
 - b. Construction Mitigation Plan. The Applicant shall prepare a "Construction Mitigation Plan" for each applicable site plan for the Solar Facility to the satisfaction of the Zoning Administrator. Each plan shall address, at a minimum, the effective mitigation of dust, any burning operations, hours of construction activity, access and road improvements, and handling of general construction complaints.
 - c. Grading plan. The Project shall be constructed in compliance with the County approved grading plan as determined and approved by the Zoning Administrator or his designee prior to the commencement of any construction activities and a bond or other security will be posted for the grading operations The grading plan shall:
 - i. clearly show existing and proposed contours;
 - ii. note the locations and amount of topsoil to be removed (if any) and the percent of the site to be graded;

- iii. Limit grading to the greatest extent practicable by avoiding steep slopes and laying out arrays parallel to landforms;
- iv. An earthwork balance will be achieved on-site with no import or export of soil;
- v. In areas proposed to be permanent access roads which will receive gravel or in any areas where more than a few inches of cut are required, topsoil will first be stripped and stockpiled on-site to be used to increase the fertility of areas intended to be seeded;
- vi. Take advantage of natural flow patterns in drainage design and keep the amount of impervious surface as low as possible to reduce storm water storage needs.
- d. Erosion and Sediment Control Plan. The County will have a third-party review with corrections completed prior to submittal for DEQ review and approval. The owner or operator shall construct, maintain and operate the project in compliance with the approved plan. An E&S bond (or other security) will be posted for the construction portion of the project.
- e. Storm Water Management Plan. The County will have a third-party review with corrections completed prior to submittal for DEQ review and approval. The owner or operator shall construct, maintain and operate the project in compliance with the approved plan. A storm water control bond (or other security) will be posted for the project for both construction and post construction as applicable and determined by the Zoning Administrator.
- f. Project Screening and Vegetation Plan. The owner or operator shall construct, maintain and operate the facility in compliance with the approved plan. A separate security shall be posted for the ongoing maintenance of the project's vegetative buffers in an amount deemed sufficient by the Zoning Administrator.
- g. The Applicant will compensate the County in obtaining an independent third-party review of any site plans or construction plans or part thereof.
- h. The design, installation, maintenance and repair of the Solar Facility in accordance with the most current National Electrical Code (NFPA 70) available (2014 version or later as applicable).

3. Operations.

- a. Permanent Security Fence. The Applicant shall install a permanent security fence, consisting of chain link, two-inch square mesh, six (6) feet in height, surmounted by three strands of barbed wire, around the Solar Facility project prior to the commencement of operations of the Solar Facility. Failure to maintain the fence in a good and functional condition will result in revocation of the permit.
- b. Lighting. Any on-site lighting provided for the operational phase of the Solar Facility shall be dark-sky compliant, shielded away from adjacent properties, and positioned downward to minimize light spillage onto adjacent properties.
- c. *Noise*. Daytime noise will be under 67dBA during the day with no noise emissions at night.

d. Ingress/Egress. Permanent access roads and parking areas will be stabilized with gravel, asphalt or concrete to minimize dust and impacts to adjacent properties.

4. Buffers.

- i. Setbacks. A minimum one-hundred fifty (150) foot setback, which includes a 50-foot planted buffer as described below, shall be maintained from the street line (edge of right of way) where the Property abuts any public right-of-ways.
- ii. A minimum one-hundred fifty (150) foot setback, which includes a 50-foot planted buffer as described below, from any adjoining property line that is improved with a single family residence.
- b. Screening. A minimum fifty (50) foot vegetative buffer (consisting of existing trees and vegetation) shall be maintained. If there is no existing vegetation or if the existing vegetation is inadequate to serve as a buffer as determined by the Zoning Administrator, a triple row of trees/shrubs will be planted on approximately 10-foot centers in the 25 feet immediately adjacent to the security fence. New plantings of trees and shrubs shall be approximately 6 foot in height at time of planting. In addition, pine seedlings will be installed in the remaining 25 feet of the 50-foot buffer. Ancillary project facilities may be included in the buffer as described in the application where such facilities do not interfere with the effectiveness of the buffer as determined by the Zoning Administrator.
- c. Wildlife corridors. The Applicant shall identify an access corridor for wildlife to navigate through the Solar Facility. The proposed wildlife corridor shall be shown on the site plan submitted to the County. Areas between fencing shall be kept open to allow for the movement of migratory animals and other wildlife.
- 5. Height of Structures. Solar facility structures shall not exceed 10', however, towers constructed for electrical lines may exceed the maximum permitted height as provided in the A1 zoning district regulations (§16-2), provided that no structure shall exceed the height of 25 feet above ground level.
- 6. Inspections. The Applicant will allow designated County representatives or employees access to the facility at any time for inspection or other County-related business purposes.
- 7. Training. The Applicant shall arrange a training session with the Greensville Fire Department to familiarize personnel with issues unique to a solar facility before operations begin.
- 8. Compliance. The Solar Facility shall be designed, constructed, and tested to meet relevant local, state, and federal standards as applicable.

9. Decommissioning.

a. Decommissioning Plan. No decommissioning plan has been provided at this time. The Applicant shall submit a decommissioning plan to the County for approval prior to the issuance of any permits. The purpose of the decommissioning plan is to specify the procedure by which the Applicant or its successor would remove the Solar Facility after the end of its useful life and to restore the property for agricultural uses.

- b. *Decommissioning Cost Estimate*. No decommissioning cost estimate has been provided at this time. The decommissioning plan shall include a decommissioning cost estimate prepared by a Virginia licensed professional engineer.
 - The cost estimate shall provide the gross estimated cost to decommission the Solar Facility in accordance with the decommissioning plan and these conditions. The decommissioning cost estimate shall not include any estimates or offsets for the resale or salvage values of the Solar Facility equipment and materials.
 - ii. The Applicant, or its successor, shall reimburse the County for an independent review and analysis by a licensed engineer of the initial decommissioning cost estimate.
 - iii. The Applicant, or its successor, will update the decommissioning cost estimate every five (5) years and reimburse the County for an independent review and analysis by a licensed engineer of each decommissioning cost estimate revision.

c. Security.

- i. Prior to the approval of the decommissioning plan, the Applicant shall provide an amount equal to the decommissioning cost estimate as security for the decommissioning of the Solar Facility.
- ii. The security shall be in the form of cash to be held by an escrow agent at a financial institution acceptable to the County pursuant to a mutually acceptable escrow agreement. Upon written request, the Board of Supervisors accept other forms of security, provided that such form of security adequately protects the interests of the County and the public upon a default of the Applicant's obligations to decommission the Solar Facility.
- iii. Upon the receipt of the first revised decommissioning cost estimate (following the 5th anniversary), any increase or decrease in the decommissioning security shall be funded by the Applicant, or refunded to Applicant (if permissible by the form of security), within ninety (90) days and will be similarly trued up for every subsequent five year updated decommissioning cost estimate.
- iv. The security must be received prior to the final building inspection and issuance of any final permit to operate the Solar Facility and must stay in force for the duration of the life span of the Solar Facility and until all decommissioning is completed. If the County receives notice or reasonably believes that any form of security has been revoked or the County receives notice that any security may be revoked, the County may revoke the special use permit and shall be entitled to take all action to obtain the rights to the form of security.
- d. Applicant/Property Owner Obligation. Within six (6) months after the cessation of use of the Solar Facility for electrical power generation or transmission, the Applicant or its successor, at its sole cost and expense, shall decommission the Solar Facility in accordance with the decommissioning plan approved by the County. If the Applicant or its successor fails to timely decommission the Solar

Facility, the property owners shall commence decommissioning activities in accordance with the decommissioning plan. Following the completion of decommissioning of the entire Solar Facility arising out of a default by the Applicant or its successor, any remaining security funds held by the County shall be distributed to the property owners in a proportion of the security funds and the property owner's acreage ownership of the Solar Facility.

- e. Applicant/Property Owner Default; Decommissioning by the County.
 - i. If the Applicant, its successor, or the property owners fail to timely decommission the Solar Facility, the County shall have the right, but not the obligation, to commence decommissioning activities and shall have access to the property, access to the full amount of the decommissioning security, and the rights to the Solar Facility equipment and materials on the property.
 - ii. If applicable, any excess decommissioning security funds shall be returned to the current owner of the property after the County has completed the decommissioning activities.
 - iii. Prior to the issuance of any permits, the Applicant and the property owners shall deliver a legal instrument to the County granting the County (1) the right to access the property, and (2) an interest in the Solar Facility equipment and materials to complete the decommissioning upon the Applicant's and property owner's default. Such instrument(s) shall bind the Applicant and property owners and their successors, heirs, and assigns. Nothing herein shall limit other rights or remedies that may be available to the County to enforce the obligations of the Applicant, including under the County's zoning powers.
- f. Equipment/building removal. All physical improvements, materials, and equipment related to solar energy generation, both surface and subsurface components, shall be removed in their entirety. The soil grade will also be restored following disturbance caused in the removal process. Perimeter fencing will be removed and recycled or re-used. Where the current or future landowner prefers to retain the fencing, these portions of fence would be left in place.
- g. Infrastructure removal. All access roads will be removed, including any geotextile material beneath the roads and granular material. The exception to removal of the access roads and associated culverts or their related material would be upon written request from the current or future landowner to leave all or a portion of these facilities in place for use by that landowner. Access roads will be removed within areas that were previously used for agricultural purposes and topsoil will be redistributed to provide substantially similar growing media as was present within the areas prior to site disturbance.
- h. Partial Decommissioning. If decommissioning is triggered for a portion, but not the entire Solar Facility, then the Applicant or its successor will commence and complete decommissioning, in accordance with the decommissioning plan, for the applicable portion of the Solar Facility; the remaining portion of the Solar Facility would continue to be subject to the decommissioning plan. Any reference to decommissioning the Solar Facility shall include the obligation to decommission

all or a portion of the Solar Facility whichever is applicable with respect to a particular situation.

PLANNING COMMISSION ACTION

The Planning Commission has three options:

- a. Recommend approval of the application with written reasons for its decision.
- b. Recommend denial of the application with written reasons for its decision.
- c. Defer the application for further discussion and consideration.

Draft Planning Commission Actions

Option 1 - Recommend approval of the application with the stated (or amended) conditions

I move that the Greensville County Solar Project, LLC's proposed 80-megawatt photovoltaic solar energy facility as described in SP-6-18, sufficiently mitigates adverse impacts associated with the project if approved with the conditions as outlined herein and recommended by the Planning Commission.

Option 2 - Recommend denial of the application

I move that the Greensville County Solar Project, LLC's proposed 80-megawatt photovoltaic solar energy facility as described in SP-6-18, does not sufficiently mitigate the adverse impacts associated with the project and should therefore be denied. Among other concerns, the Planning Commission finds that,

- 1. The proposed solar energy facility does not preserve the rural character of the County.
- 2. The use is of such a nature or located so as to exercise a detrimental influence on the surrounding neighborhood.
- 3. The proposed solar energy facility does not incorporate sufficient buffers to address the impacts on adjacent areas.
- 4. The application property is designated in the future land use plan as Rural Residential and is planned for agricultural and farming uses and the 1,099 acre solar energy facility is inconsistent with this designation.
- 5. The Comprehensive Plan indicates that solar energy facilities may be acceptable if not detrimental to surrounding areas and the proposed facility encroaches on existing residential and agricultural uses.
- 6. Concern regarding the decommissioning of the proposed solar energy facility, such as, financial assurance that the facility will be properly removed and restoration of the application property to its agricultural uses.

Option 3 – Deferral of the application

request regarding its proposed 80-megawatt photovoltaic solar energy facility SP-6-18, until the	I move that	the Planning Co	mmission d	efer a decisio	ı on C	reensville	e Coun	ty Solar I	Project, Ll	LC's
Planning Commission meeting scheduled to begin at p.m. or										
										or
	Č		, in th	e Board of Su	pervis	ors meetir	ig roon	n.		



SPECIAL USE PERMIT APPLICATION - CONDITIONAL USE PLANNED DEVELOPMENT

GREENSVILLE COUNTY, VA

JUNE 12, 2018

GREENSVILLE COUNTY SOLAR PROJECT, LLC 16105 W. 113TH STREET, STE. 105, LENEXA, KS 66219



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Attachments

Attachment A: Special Use Permit Application Form Attachment B: Conceptual Site Plan Attachment C: Tax Parcel Map

Attachment D: Timber Preservation Area Attachment E: Financial Impact Study



1.0 PROJECT COMPANY:

Greenville County Solar Project, LLC (Project Company) is a wholly owned subsidiary of Tradewind Energy, Inc. (TWE). TWE was founded in 2002 in Lenexa, Kansas and has since established itself as a leading renewable energy development company with projects in over 20 states throughout the U.S. TWE owns over 9 gigawatts (GW) of wind development assets and 5 GW of solar development assets. TWE's business model develops projects and then transfers those projects to another entity which would construct, own, and operate the project. TWE has partnered with Enel Green Power North America, Inc. (EGP-NA) on over 3 GW of renewable energy projects throughout the U.S.

2.0 PURPOSE:

According to the Greensville County, Virginia Zoning Ordinance (1992), Article 4, a solar energy project, greater than 20 MW_{AC} is considered a special use allowed in the Agricultural Districts through approval of a Conditional Use Planned Development with review and a recommendation by the Planning Commission and approval by the Greensville County Board of Supervisors. The Project Company respectfully requests approval of a Conditional Use Planned Development Special Use Permit (SUP) approval for the proposed Greensville County Solar Project (Project). The Project's completed SUP application form is included in Attachment A.

3.0 PROPOSED USE:

The Project is a solar energy facility proposed to be located approximately two (2) miles southwest of Emporia, Virginia, west of Interstate-95 (Attachment B: Greensville County Solar Project Conceptual Site Plan). The conceptual site plan fulfills the SUP application requirement for a site sketch. The Project site includes approximately 1,200 acres of cultivated cropland and forestland of which approximately 800 acres will be developed with permanent facilities as a solar energy facility. The Project site includes the following tax parcels: 34-35, 34-36, 35-13, 35-14, 35-20, 35-21, 35-22, 35-24, 35-25, 35-30, 35-31 (Attachment C: Greensville County Solar Project Tax Parcel Map).

The Project has been under development since 2015. Over the past three (3) years, numerous development activities have taken place, including multiple electrical transmission, environmental and engineering studies as well local, state and federal agency coordination. In addition, the Project Company held a community meeting on April 18, 2018 at the Emporia, Virginia YMCA in order to provide detailed Project information, answer questions, address concerns and receive community feedback. No significant concerns with the proposed Project were raised during the community meeting.

The Project has been designed to minimize its impact on natural resources through responsible siting, extensive due diligence, informed project design and best management practices, as noted below:



- The Project is proposed to be sited primarily on previously disturbed, flat, cultivated cropland that will require minimal grading. However, a grading plan will be included in the Project's final design documents submitted to the County prior to construction.
- The Project site was selected in part due to its proximity to an existing transmission line to minimize the length of above ground transmission (gen-tie) lines needed to interconnect to the electrical grid.
- The proposed Project will be visually buffered from the surrounding area by existing forested areas and a vegetative buffer to be installed during construction as detailed below.
- TWE is working with Project landowners on a Timber Preservation Agreement in which the landowners commit to preserve (not harvest) a generally 50 foot wide area of timber along their property line. A map depicting the approximate locations of the Timber Preservation Agreement is included as Attachment D: Greensville County Solar Project Timber Preservation Area.
- Project solar panels will be setback a minimum of 50 feet from adjacent non-participating property lines. In most cases, Project solar panel setbacks will be in excess of 100 feet; and in some cases, setbacks will exceed 1,500 feet (Attachment B).
- At the end of the Project's useful life, the Project will be decommissioned, solar energy facility infrastructure removed and the site restored similar to its pre-construction condition.
- The Project will avoid environmentally sensitive areas including wetlands, floodplains and steep slopes.
- After completion of construction, the site will be re-vegetated with a mix of native grasses designed to:
 - o Enhance soil structure and organic content;
 - o Reduce soil erosion;
 - Minimize noxious and invasive plant species; and
 - Provide pollinator habitat.
- The change in land use and implementation of a stormwater pollution prevention plan will reduce agricultural runoff and nutrient loading to nearby waterways.

Once operational, the proposed Project will generate up to 80 megawatts, Alternating Current (MW_{ac}) of clean renewable energy that will interconnect to the nearby existing Virginia Electric & Power Company transmission system. In general, the Project will include a ground-mounted solar array that will utilize photovoltaic (PV) solar modules and single-axis tracking technology, inverter stations, substation, perimeter security fencing and the necessary interconnection facilities as specified by the local utility to connect the Project to the electrical grid (Attachment B). The Project will be an unmanned facility; however, small operations and maintenance crews will visit the site on a routine basis. The Project will not increase long term traffic flow in the area. In addition, solar energy facilities do not generate sound that this audible outside of the project fence-line; and the facilities do not generate harmful air emissions.

There are a few residential properties located in the surrounding area and those residences will be buffered from the Project by existing forested areas and Interstate-95. All residences within the Project boundary



are owned by participating landowners who have leased property to the Project. A vegetative buffer will be installed along portions of the Project that are not naturally buffered and are located adjacent to road right of ways (Attachment D). It is anticipated that the vegetative buffer will include native evergreen, canopy tree and shrub species including, but not limited to: eastern red cedar, white pine, northern white cedar, mountain laurel, wax myrtle and viburnum dentatum.

Once the Project has reached the end of its useful life, the facility will be decommissioned and the land restored to a similar condition to that prior to Project construction. The Project Company has entered into a Solar Energy Lease (Agreement) with multiple landowners to lease the property that comprises the Project site. Each Agreement with a participating landowner requires that the Project Company remove Project facilities from the Project site and restore the property within twelve (12) months after the expiration or termination of the Agreement. In addition, the Project Company will provide a detailed decommissioning plan prior to construction.

4.0 SCHEDULE:

Project operations could begin as early as 2020; however, there are several factors that will drive the actual commercial operation date including, but not limited to: coordination with the utility that the Project will interconnect with and execution of a long term Power Purchase Agreement with a utility, commercial or industrial entity. It is anticipated that Project construction will take approximately six (6) to nine (9) months to complete.

5.0 PLANNING AND ZONING COMPLIANCE:

The Project site is located in the A-1 Agricultural Zoning District and has been designed to meet or exceed all standards set forth in the County Zoning Ordinance applicable to a Solar Energy Project in the A-1 Zoning District. The solar array will be setback a minimum of 100 feet from the centerline of adjacent roadways with a width less than 50 feet, 75 feet from the street line of roadways with a width of 50 feet or more and a minimum of 50 feet from adjacent property lines at the Project boundary.

The Project Company requests that Project be approved with all parcels within the Project boundary treated as a single parcel for the purposes of yard and setback requirements as a part of the Conditional Use Planned Development approval process.

A. Conditional Use Planned Development Considerations

Per the County Zoning Ordinance, Article 16, a Conditional Use Planned Development may be approved to provide for developments that are of a different character from the provisions of



existing zoning districts, including modification of use and bulk requirements and approval of additional standards and exceptions, provided that the Planning Commission and Board of Supervisors considers the following in making a determination as to the use:

(a) That the uses permitted by such exception are necessary or desirable and are appropriate with respect to the primary purpose of the development.

Local production of renewable energy is identified in the Greensville Comprehensive Plan as a planning issue with a stated policy to encourage Solar Energy Projects greater than 20 MW_{AC} in agricultural zoned districts, if not detrimental to the surrounding area. This proposed Project would create local production of renewable energy in an agricultural zoning district that would not be detrimental to the surrounding area. See response to item (b) below and in responses to the consistency of the Project with the Comprehensive Plan below at (B)(2) for additional information on how the Project will fit with the neighborhood.

(b) That the uses permitted by such exception are not of such a nature or located so as to exercise a detrimental influence on the surrounding neighborhood.

Solar energy facilities have proven to be compatible with neighboring agricultural and rural uses as explained further in subsection (B) below. Meeting and exceeding zoning district setbacks at the Project boundary and natural and additional screening will ensure that the surrounding area is buffered from the Project. Generally, solar energy projects do not negatively impact neighbors with noise, odor or traffic issues that can be problematic with many other types of neighboring developments.

(c) If a use is not specifically enumerated in the zoning ordinance by-right, special exception, or special use in any district, then the planning commission may recommend and the board of supervisors may authorize such use. Nothing contained in this section shall be construed to permit the approval of any use specifically prohibited.

Not applicable. The Zoning Ordinance permits a Solar Energy Project greater than 20 MW_{AC} as a Special Use through a Conditional Use Planned Development approval in Agricultural zoned districts.

The Planning Commission may recommend and the Board of Supervisors may approve exceptions to applicable bulk and/or development regulations of the Zoning Ordinance provided that they consider:

(a) That such exception shall be solely for the purpose of promoting an integrated plan no less beneficial to the residents or occupants of the development, as well as neighboring property, than would be obtained under the zoning ordinance's



bulk and/or development regulations for buildings developed on separate zoning lots.

The Project Company requests that the Project site be treated as a single parcel for the purpose of setback and yard requirements of the Zoning Ordinance. This allows solar panels and related facilities to be sited within yards and closer to property lines of other participating property owners who have also leased land for the Project. The standards will be no less beneficial to residents and occupants of the Project site. Each property owner of land within the Project site has entered into an Agreement with the Project Company that governs how the property can be developed and will benefit from lease payments as a result of the Project. Clustering of project facilities within the Project boundary allows them to be more beneficially located for the Project and the participating property owners. Neighboring property will not be affected as the standard A-1 zoning district setbacks and yard requirements will apply at the Project boundaries adjacent to their properties.

(b) That the minimum lot requirements of the zoning ordinance may be decreased without limitation; provided that permanent open space or land, in an amount equivalent to that by which each residential lot or building site has been diminished under this provision, shall be provided in common areas within the development.

Only a small portion of the property within the Project boundary will be developed with permanent facilities. Participating property owners may continue to use the remainder of their property. Ample open space, at least equivalent to that by which yard or setback requirements are reduced, will remain available to property owners within the Project boundary. The Project will not add permanent residents or occupants that occupy the Project site and require additional open space.

(c) The director of planning, planning commission or board of supervisors may require any reasonable method to guarantee that open spaces provided as an integral part of the conditional use planned development shall always remain available to those people for whom they were designed to serve and that such open spaces shall be reasonably maintained.

The use of land within the Project boundary is governed by Agreements executed with the owner of each property. Unlike a residential or commercial development, there will be no residents added by the Project to utilize open space. Instead, participating property owners may continue to use their land that is not developed with permanent facilities for the same uses as today. These participating property owners will receive lease payments for the Project's use of their property.

B. Special Use Permit Considerations



Special uses authorized by the Board of Supervisors are identified in Table 4.1 of the Zoning Ordinance. Solar Energy Projects greater than 20 MW_{ac} are permitted as a special use in the A-1 Zoning District through approval of a Conditional Use Planned Development.

General conditions that apply to all special uses are outlined in Section 4-4 of the Zoning Ordinance and are listed below in bold with responses following each.

(a) The use shall be designed or arranged on the land in such a way as to cause no more adverse impact on the adjacent property, and/or the neighborhood than might be caused by the lease restrictive use otherwise permitted by right in the district.

The Project will adhere to setbacks and yard requirements at the Project boundary adjacent to non-participating property owners as any use in the A-1 Zoning District: Project solar panels will be setback a minimum of 100 feet from the centerline of adjacent roadways. In addition, Project solar panels will be setback a minimum of 50 feet from adjacent non-participating property lines. In most cases, Project solar panel setbacks will be in excess of 100 feet; and in some cases, setbacks will exceed 1,500 feet (Attachment B).

The Project site is currently buffered by forested areas and Interstate 95, however additional vegetative screening will be provided as needed along road right-of-ways. In order to preserve the buffer created by existing forested areas, TWE is working with Project landowners on a Timber Preservation Agreement in which the landowners commit to preserve (not harvest) a generally 50 foot wide area of timber along their property line. (Attachment D).

(b) The use shall comply with all licensing requirements, if any, of any County, State or Federal government or agency.

The Project Company will comply with all governmental licensing requirements applicable to the Project at the County, state and federal level.

(c) The use shall not be operated as to cause a nuisance to the neighborhood in which it is located.

The Project will not cause a nuisance to neighboring property owners or occupants. Additional details are provided below in response to specific Special Use considerations.

(d) In granting a special use, the Board of Supervisors shall consider the public convenience, necessity and general welfare and its action shall also be consistent with good zoning practices.

The Project will be consistent with maintaining the public welfare and upholding good zoning practices as it will meet or exceed the requirements of the Zoning Ordinance applicable to Solar Projects in the A-1 Zoning District.



Per the County Zoning Ordinance, Article 16, a Special Use Permit (SUP) shall not be issued unless the Board of Supervisors finds that the proposed use (1) would not be detrimental to the community and (2) is in conformity with the Comprehensive Plan and Policies. Based on information provided below and throughout the SUP application, the proposed Project will not be detrimental to the community, rather it will beneficial; and the Project conforms to the County Comprehensive Plan and Policies.

1. Project Would Not Be Detrimental to the Community

As required by the Greensville County SUP application, the Project Company evaluated the following considerations for the proposed Project:

Traffic: Construction of the proposed Project is estimated to take approximately six (6) to nine (9) months. The hours of construction activity, the level of traffic, and the number of employees on the Property during that period will vary by the type and phase of construction. Heavy construction work will occur during daylight hours. Once operational, the Project will be an unmanned facility maintained by small operations and maintenance crews (one to four people) that visit the site as necessary. The proposed Project will not impact long term traffic flow in the area and therefore will not strain the County's existing transportation infrastructure.

Noise: Solar energy facilities do not generate sound that is audible outside of the Project fence-line.

Lighting: The proposed Project will utilize PV solar panels, which are designed to absorb the sun's light to convert it into energy, rather than reflect it. PV solar panels use non-reflective glass and are generally less reflective than windows. The proposed Project does include accessory structures that require lighting. To the extent exterior lighting is necessary for Project facilities, such lighting will include only minimal, non-intrusive security lighting that will be motion-sensored and activated only when necessary and designed to face down and away from any neighboring properties. Security lighting would be located near the secure entrance to the Project site.

Dust: The Project would not result in adverse impacts to air quality. Some particulate emissions from dust generation would result from the operation of heavy equipment during construction. However, these emissions would be temporary and limited to active areas of construction. Best Management Practices (BMPs) would be implemented during construction to mitigate dust emissions. Specifically, water trucks would be utilized to spray disturbed areas to minimize dust emissions.

Fumes: Large earth-moving equipment, skid loaders, trucks, and other mobile sources may be powered by diesel or gasoline and are sources of combustion emissions. Seasonal winds



have the potential to move emissions outside of the Project area; however, emissions would be minimal and transient in nature during the period of construction (six to nine months) and would not significantly contribute to the ozone levels in Greensville County.

Vibrations: Vibration levels will not increase as a result of the proposed Project.

Operations (Outside storage of materials, screening): Project operations will not require outdoor storage of any materials. Therefore, this consideration does not apply. The Project site is buffered by natural screening of forested areas and Interstate-95, however, additional vegetative screening will be added as necessary along certain road right-of-ways as provided herein.

Hours of Operation: The proposed Project will operate during daylight hours only.

Number of Employees: The proposed Project will create approximately 300 temporary jobs during construction; and one (1) to four (4) permanent jobs during operations based on total employee hours spent at the facility. Once operational, the Project will be an unmanned facility.

Type of Equipment: In general, Project equipment and infrastructure will include a ground-mounted solar array that will utilize PV solar modules and single-axis tracking technology, inverter stations, substation, perimeter security fencing and the necessary interconnection facilities as specified by the local utility to connect the Project to the electrical grid.

Signage: Project signage will be limited to warning signs and will be in compliance with the County's Zoning Ordinance.

2. Project is in Conformity with Comprehensive Plan and Policies

Comprehensive Plan (Compatibility): The Project Company submitted a 15.2 2232 Review application for the proposed Project on April 10, 2018. The 15.2 2232 Review application included a review of the County's Comprehensive Plan and determined the proposed Project is consistent with and supportive of the stated goals of the County's Comprehensive Plan, General, Land Use, Residential following stated which includes the Commercial/Industrial goals and objectives in **bold** below. The Project Company's response to how the Project is consistent with the Comprehensive Plan's goals follows each goal and objective in italics.

GENERAL

3. Preserve the rural character by directing and controlling growth in designated areas.



The Project site is composed of cultivated cropland and forested areas in the A-1 Zoning District. The site is naturally buffered from the surrounding area by forested areas; and portions of the Project site that are not forested and are located adjacent to public right of ways, will include a vegetative buffer outside the fence-line. In order to preserve the buffer created by existing forested areas, TWE is working with Project landowners on a Timber Preservation Agreement in which the landowners commit to preserve (not harvest) a generally 50 foot wide area of timber along their property line (Attachment D). Once operational, the Project will be an unmanned facility. With the exception of the small maintenance and operations crews that visit the site as necessary, the Project will not increase long term traffic flow in the area. Solar energy facilities do not generate sound that is audible outside of the project fence-line; and the facilities do not generate harmful air emissions. Once the Project has reached the end of its useful life, the infrastructure will be removed and the land restored according to the agreement(s) as signed with the landowners and the decommissioning plan to be approved by the County. Given that the Project is visually buffered from the surrounding area and that solar energy facilities do not generate nuisances (i.e. traffic, sound and odors); and considering that the Project site could be converted back to previous uses, including agricultural uses after the Project is decommissioned, it is the Project Company's opinion that the Project is consistent with the Comprehensive Plan's goal to maintain the County's rural character.

LAND USE GENERAL

1. Encourage new development that compliments surrounding uses

Post-construction, the Project site will be re-vegetated with a native grass seed mix. The seed mix will take into consideration soil conditions, meteorological conditions, native species, noxious weeds, project specifications, cost and availability. Large open areas on the Project site will be planted with a pollinator friendly mix and shrubs. The anticipated benefits of this plan include, but are not limited to:

- Stormwater control and excellent soil permeability, allowing water to flow through the soil, rather than away from the site.
- Low maintenance native species are expected to establish quickly and develop deep and complex root structures that inhibit invasive and noxious weed growth, thereby reducing maintenance and minimizing the amount of herbicides applied to the site.
- Conservation for pollinators due to habitat loss, pesticides, disease and spread of invasive plants, there has been a rapid decline in pollinator populations. This decline is being felt by the agricultural communities and beyond as pollinators are vital to the production of healthy crops. In the United States one third of all agricultural output depends on pollinators.

As designed, the Project will include best management practices that decrease sedimentation and erosion and increase pollinator habitat, both of which benefits local agriculture. Given



this, the Project is consistent with the Comprehensive Plan goal to encourage new development that complements the surrounding uses.

2. Concentrate development in appropriate locations by encouraging more efficient site design and incorporating proper buffers between differing uses.

The proposed Project will comply with all Greensville County Zoning Ordinance requirements for the A-1 Zoning District as approved through the Conditional Use Planned Development process. Compliance is depicted in the detailed site plan (Attachment B: Greensville County Solar Project Conceptual Site Plan).

RESIDENTIAL

3. Prevent the encroachment of conflicting land uses on existing viable neighborhoods

The Project is located in an A-1 Zoning district, outside of 'Residential Areas' as depicted on the Urban Services Area Map in the Comprehensive Plan. As stated above, the Project is naturally buffered from the surrounding area by existing forested areas.

COMMERCIAL/INDUSTRIAL

3. Plan future industrial sites near major transportation systems and utilities lines

The Project site has been specifically selected for its proximity to the high-voltage Dominion transmission line located along the east Project Boundary. This location minimizes the need to build additional above ground transmission lines in the County to serve the Project site. In addition, the Project is located west of the Interstate-95 (I-95). Based on the Project's proximity to the electrical grid and I-95, it is the Project Company's opinion that Project is consistent with the stated goals of the Comprehensive Plan.

4. Evaluate large scale industrial economic development projects that will provide an economic benefit to the County but that may not be in designated development areas or near major transportation systems.

The proposed Project is a utility-scale solar energy facility that will provide economic benefit in the form of long-term tax revenue for the County, landowner payments; approximately 300 temporary jobs during construction; and one (1) to four (4) permanent jobs during operations. To the extent practical and available, the Project Company will endeavor to utilize local residents for construction and permanent jobs. Based on a review of the County Comprehensive Plan, the Project site is not located in a designated



development area; however, it is located adjacent to I-95. Based on the potential economic benefits of this large-scale Project to the County, it is the Project Company's opinion that Project is consistent with the stated goals of the Comprehensive Plan.

Through the input of Greensville County citizens and recommendations of County Staff, the Comprehensive Plan lists specific planning issues and strategies/polices for addressing said issues including:

LOCAL PRODUTION OF RENEWABLE ENERGY

1. There is great interest in the construction of Solar Energy Farms throughout the County as a result for the quest to generate environmental friendly energy.

Solar energy is one of the fastest growing industries in the country. In 2017, the United States installed 10.6 gigawatts (GW) of solar photovoltaic capacity to reach 53.3 GW of total installed capacity, enough to power 10.1 million American homes¹. In 2016, the total solar investment in the Commonwealth of Virginia was \$236 million, which included 3,236 jobs². An invested interest in utility scale solar development through approval of the application for this Project will benefit the County from both an economic and environmental standpoint.

STRATEGIES/POLICIES

a) If not detrimental to the surrounding area, Solar Energy Projects greater than 20 MW_{AC} are encouraged in agricultural zoned districts.

Tradewind and project entities such as the Project Company work diligently to maintain positive relations with agricultural neighbors. Solar energy facilities have proven to be compatible with adjacent agricultural uses. The Project Company has completed (and initiated) multiple transmission, engineering, environmental and financial studies in order to determine what, if any, adverse impacts the proposed Project could have on the Project site and surrounding area. These studies include: a Critical Issues Analysis, transmission studies, economic impact study, Phase I Environmental Site Assessment, wetland delineation survey and cultural resource survey. The results of these surveys to date have determined that the proposed Project will not have a significant adverse impact to the Project site or surrounding area. Therefore, the proposed Solar Energy Project will not be detrimental to the surrounding area, and it is the Project Company's opinion that the Project is consistent with this stated strategy of the County's Comprehensive Plan.

c) It is encouraged that a Decommissioning plan be provided by the owner of such Solar Energy Projects to ensure to proper dismantling of the project.



The Project Company has entered into a Solar Energy Lease (Agreement) with each landowner of the Project site which requires that the Project Company remove Project facilities from the Project site and restore the property within twelve (12) months after the expiration or termination of the Agreement. The Project Company will provide a detailed decommissioning plan prior to construction.

ECONOMIC DEVELOPMENT ISSUES

1. Unemployment rates in Greensville County, as in all of Southside Virginia, are higher that the rates of the Commonwealth of Virginia. In June 2013, Greensville County unemployment rate was 8.7% and the Commonwealth's unemployment rate was 6.0%.

The proposed Project will create approximately 300 temporary jobs during construction; and one to four permanent jobs during operations. To the extent practical and available, the Project Company will endeavor to utilize local residents for construction and permanent jobs. Development that creates both temporary construction and full time jobs during operation and maintenance is consistent with the Comprehensive Plan's stated goals.

STATEGIES/POLICIES

b) Update the County's current Economic Development Strategy regarding new commercial and industrial activities to include large scale economic development projects in areas outside of existing planned areas for commercial and industrial development.

The Project Company proposes to make a substantial, long-term capital investment in the County by building the Project. The proposed Project is a large-scale development in an area that is outside of the existing planned areas for commercial and industrial development. The Project would provide economic benefit to the County and its residents in the form of tax revenues, temporary and permanent employment opportunities and lease payments to landowners. The Project is consistent with the Economic Development Strategy and the stated strategies/policies of the Comprehensive Plan.

6.0 ECONOMIC IMPACT ANALYSIS:

A third-party economic impact analysis was completed for the Project by Strategic Economic Research, LLC (Attachment D). The analysis incorporated the latest National Renewable Energy Laboratory's Jobs and Economic Development Impacts (JEDI) PV Model (PV12.23.16). The basis of this analysis is to study the direct, indirect and induced impacts on job creation, wages and total



economic output. The Greensville County Solar Project represents an investment in excess of \$100 million. The total development is anticipated to result in the following:

Jobs

- 257 new local jobs during construction for Greensville County
- 415 new local jobs during construction for the State of Virginia
- 9.6 new local long-term jobs for Greensville County
- 11.3 new local long-term jobs for the State of Virginia

Earnings

- Over \$15.6 million in new local earnings during construction for Greensville County
- Almost \$26.0 million in new local earnings during construction for the State of Virginia
- Over \$340 thousand in new local long-term earnings for Greensville County annually
- Over \$458 thousand in new local long-term earnings for the State of Virginia annually

<u>Output</u> - the value of production in the state or local economy. It is an equivalent measure to the Gross Domestic Product.

- Over \$19.6 million in new local output during construction for Greensville County
- Over \$37.5 million in new local output during construction for the State of Virginia
- Almost \$435 thousand in new local long-term output for Greensville County annually
- Over \$748 thousand in new local long-term output for the State of Virginia annually

Property Taxes

• Greensville County should receive \$155,556 in property taxes in the first year of the Project.

7.0 CONCLUSION:

The Project Company respectfully requests approval of a Conditional Use Planned Development SUP for the proposed Project. The Project Company believes the application package to be complete. Should you find it to be deficient please contact us immediately so that we can provide the necessary additional information. We appreciate your time and attention to this matter and look forward to future coordination with the County staff and elected officials.

ATTACHMENT A

Greensville County Solar Project Special Use Permit Application Form



SPECIAL USE PERMIT

	FILE#:
Owner	Agent/Applicant (if different from owner)
Name: Greensville County Solar	Project, LLC
Physical Address 16105 West 113t	h Street. Suite 105
Lenexa, Kansas,	66219
Mailing Address: Same as above	
Telephone: 913.953.5211	
Tax Map/Parcel Number(s)	Acreage(s) Election District(s)
1. See Exhibit I	/
2.	
General Location: Approximately t	wo miles southwest of Emporia, Viginia, west of I-95
Current Zoning/Proffers	Existing Use Proposed Use
1 A-1 / Agri	cultral , Solar Energy Project greater than 20 MWac
2.	cultral , Solar Energy Project greater than 20 MWac
PLACEMENT, PARKING AREA(S), STOI Detail Description of Request (Address impact of See Attachment B	OSAL SHOWING BUILDING HEIGHT AND RAGE AREA(S), UTILITIES, ETC. of proposal on check list items):
Justification: See Application Report	and Attachments
representatives of Greensville County may inspe	
Signature Haller	May 7, 2018
(Agents must provide written documentation of	authority) See Exhibit II
Jennifer Dean, V.P.	
Greensville County Solar Project Received by:	Date:
Planning Commission Action;	
Board of Supervisors Action:	



GREENSVILLE COUNTY. SPECIAL USE PERMIT CHECK LIST

HEALTH, SAFETY, AND WELFARE:

Traffic: See Application Report
Noise: See Application Report
Lights: See Application Report
See Application Report Dust:
Fumes:
Vibrations: See Application Report
Operations (Outside storage of materials, screening); See Application Report
Hours of Operation: See Application Report
Number of Employees: See Application Report Type of Equipment:
Signage; See Application Report
COMPREHENSIVE PLAN (Computibility): See Application Report

EXHIBIT I GREENSVILLE COUNTY SOLAR PROJECT TAX MAP / PARCEL NUMBERS

EXHIBIT I

Property Owner	Tax Map/ Parcel Number	Total Parcel Acreage (County Data)	Total Acres of Combined Parcels Under Agreement with Greensville County Solar Project, LLC*	Election
Babb, Deanna M	35 25	N/A	92	One
Ferguson, James S. Sr. & Sheila B	35 13	25		One
	35 14	83.59	717	One
	35 20	23.73	717	One
	35 21	134.34		One
GMF Real Estate, LLC	35 30	238.22	3.113	One
	35 31	103	040	One
Moore, Clifton Dean & Lori	34 35	132.8		One
	34 36	27.6	UUV	One
	35 22	125	}	One
	35 24	134.68		One
Thomas, Edward Ronald & Cindy Moore	35 32	60.54	47	One

N/A: Not available in county data

EXHIBIT II GREENSVILLE COUNTY SOLAR PROJECT LANDOWNER AUTHORIZATIONS

AUTHORIZATION

The undersigned, as the owner of the real property described in Exhibit A attached hereto (the "Property"), hereby consents to the Property being included in that certain Greensville County, Virginia Special Use Permit Application (the "Application") to be submitted to Greensville County, Virginia by Greensville County Solar Project, LLC, a Delaware limited liability company (the "Company"), and hereby authorizes the Company to execute and submit the Application to the County, along with any other documents required in connection with the procedures set forth in the Zoning Ordinance, all as such owners authorized agent.

Dated: May 7, 2018

OWNERS:

Deanna M. Babb

Deanna M. Babb

EXHIBIT "A"

DESCRIPTION OF THE PROPERTY

THE FOLLOWING REAL PROPERTY LOCATED IN THE COUNTY OF GREENSVILLE, COMMONWEALTH OF VIRGINIA:

NINETY-TWO (92) ACRES, MORE OR LESS, CONTAINED WITHIN THE PROJECT BOUNDARY AS GENERALLY DEPICTED ON EXHIBIT A-1 AND DESCRIBED AS FOLLOWS:

All that certain tract of parcel of land lying, being and situate in Hicksford Magisterial District, Greensville County, Virginia, containing 91.21 acres, more or less and being the residue of a tract containing 100 acres, as shown and described on a plat of survey made by R.R. Moss, dated September 30, 1880, which plat is of record in the Clerk's office of the Circuit Court for Greensville County, Virginia, in Deed Book 13, at page 731.

Being a portion (a) of the same property as conveyed to C.C. Collins by deed dated May 18, 1882, from J.J. Moore, et al., which deed is of record in the Clerk's office aforesaid in Deed Book 13, at page 730.

AUTHORIZATION

The undersigned, as the owner of the real property described in <u>Exhibit A</u> attached hereto (the "**Property**"), hereby consents to the Property being included in that certain Greensville County, Virginia Special Use Permit Application (the "**Application**") to be submitted to Greensville County, Virginia by Greensville County Solar Project, LLC, a Delaware limited liability company (the "**Company**"), and hereby authorizes the Company to execute and submit the Application to the County, along with any other documents required in connection with the procedures set forth in the Zoning Ordinance, all as such owners authorized agent.

Dated: May 7, 2018

OWNERS:

Clifton Dean Moore

Clifton Dean Moore

EXHIBIT "A"

DESCRIPTION OF THE PROPERTY

THE FOLLOWING REAL PROPERTY LOCATED IN THE COUNTY OF GREENSVILLE, COMMONWEALTH OF VIRGINIA:

THREE HUNDRED SEVENTY FIVE ACRES, MORE OR LESS, AS DEPICTED ON EXHIBIT A-1 AND LYING WITHIN THE FOLLOWING DESCRIBED REAL PROPERTY:

All that certain tract, parcel, or lot of land, lying in Hicksford Magisterial District, Greensville County, Virginia, containing 132.8 acres, bounded by the C.C. Collins land, the land of T.B. Hawkins, the Ed Mitchell tract and others, and known as a part of the Rockbridge Mill Tract, the said tract of land consisting of four tracts shown on a plat made by Paul King, C.E., recorded in the Clerk's Office of Greensville County, Virginia, in Plat Book 2, at page 163 as Tract No. 1,2,3 and 4; Tract No. 1, containing 28.3 acres; Tract No. 2, containing 32.4 acres; and Nos. 3 and 4, containing 72.1 acres.

The above described real estate is the same as conveyed A.W. Collins and W.F. Collins by deed from G.W. Harrison and wife, dated 2 February 1927, and of record in the Clerk's Office aforesaid in Deed Book 41, at page 25.

AND

All that certain tract or parcel of land, containing 27.6 acres, adjoining land of T.B. Hawkins, Mrs. Bettie Gay and others, situate in Hicksford Magisterial District, Greensville County, Virginia, and designated as Tract No. 5 on plat of Rock Bridge land, of record in the Clerk's Office aforesaid in Plat Book 2, at page 163.

The above described real estate in the same as conveyed A.W. Collins and W.F. Collins by deed from L.C. Harrell, Jr., Special Commissioner, dated 25 June 1942, and of record in the Clerk's Office aforesaid in Deed Book 50, at page 159.

AND

That certain tract or parcel of land, containing 125 acres, more or less, situate in Hicksford Magisterial District, Greensville County, Virginia, bounded on the north by lands now or formerly owned by J.W. Gay, on the east by the Junction Farm, formerly owned by Mollie W. Jones, and afterwards owned by Farmers Land and Insurance Company, on the south by lands now or formerly belonging to R.H. King, and on the west by the J.E. Mitchell land. Said tract of land is locally known as the Bennett Place.

The above described property is the same as that conveyed to Arthur Warren Collins and Warner Franklin Collins by deed from E. Peyton Turner, Special Commissioner, dated October 21, 1935, and of record in the Clerk's Office of the Circuit Court of Greensville County, Virginia, in Deed Book 44, at page 528.

AND

All that certain tract of parcel of land lying and being situate in Hicksford Magisterial District, Greensville County, Virginia, containing 134.68 acres, by actual survey made by J.C. Feild, Surveyor, dated July 10, 1939, of record in the Clerk's Office of the Circuit Court of Greensville County, Virginia, in Plat Book 3, at page 128, and being bounded and described as follows: BEGINNING at a point in the center of highway number 639 and running thence N 4 degrees W 260 feet; N 18-1/2 degrees W 1390 feet to a road; thence along said road N 18-1/2 degrees W 739 feet; N 13 degrees E 564 feet; N 34-1/2 degrees E 405 feet to a pine tree in the intersection of the said road with another road; thence leaving the said road N 68-1/2 degrees E 1700 feet to a stake, a corner; thence S 1/4 degree E 909 feet; S 1/4 degree E 3300 feet to an oak tree on highway number 639 and thence along said highway number 639 N 71-1/4 degrees 1263 feet to the point of BEGINNING, being bounded on the north by Gay land on the east by lands of Collins and King, on the south by said state highway number 639 and on the west by the Collins land.

The above described property is in all respects the same as that conveyed to J.A. Moore from E.F. Robinson and wife, by deed dated 16 September 1939, of record in the Clerk's Office aforesaid in Deed Book 47, at page 338.

AUTHORIZATION

The undersigned, as the owner of the real property described in <u>Exhibit A</u> attached hereto (the "Property"), hereby consents to the Property being included in that certain Greensville County, Virginia Special Use Permit Application (the "Application") to be submitted to Greensville County, Virginia by Greensville County Solar Project, LLC, a Delaware limited liability company (the "Company"), and hereby authorizes the Company to execute and submit the Application to the County, along with any other documents required in connection with the procedures set forth in the Zoning Ordinance, all as such owners authorized agent.

Dated: May 7, 2018

OWNERS:

James Ferguson

EXHIBIT "A"

DESCRIPTION OF THE PROPERTY

THE FOLLOWING REAL PROPERTY LOCATED IN THE COUNTY OF GREENSVILLE, COMMONWEALTH OF VIRGINIA:

TWO HUNDRED SEVENTEEN ACRES, MORE OR LESS, CONTAINED WITHIN THE PROJECT BOUNDARY AS DEPICTED ON EXHIBIT A-1 AND LYING WITHIN THE FOLLOWING DESCRIBED REAL PROPERTY:

Identified in the Greensville County Geographical Index System as Parcel ID Numbers:

35-13

35-14

35-20 (part)

35-21 (part)

All those certain tracts or parcels of land situate in Hicksford Magisterial District, Greensville County, Virginia.

That certain tract or parcel of land containing 25 acres, more or less, known as part of the Junction Farm, as set forth and shown on a plat made by Henry Weiss, Surveyor, dated December 8, 1914 of record in the Clerk's Office of the Circuit Court of Greensville County, Virginia in Plat Book 1 at Page 377; TAX PARCEL# 35-13.

AND

That certain tract or parcel of land containing 93 acres, more or less, known as part of the Junction Farm and being bounded on the north by the lands now or formerly belonging to Morgan, on the east by lands now or formerly belonging to Nora M. Kistler, Wright and Anderson, on the south by lands now or formerly belonging to William Surring and on the west by the Gay Tract. TAX PARCEL #35-14.

LESS AND EXCEPT 20.06 acres conveyed to James S. Ferguson and Sheila B. Ferguson by deed dated August 5, 1980 recorded in Deed Book 130 at Page 479.

AND

BEGINNING at a stake 15 feet east of an iron being designated at Point "B" and running thence N 79° 23′ E 547.8 feet to a 14 inch Pine; thence N 80° 02′ E 236.94 feet to an iron; thence S 73° 30′ E 94.05 feet to a stake; thence S 39° 35′ E 213.84 feet to a stake; thence S 38° 59′ E 273.9 feet to an iron; thence S 79° 31′ W 1118.5 feet to a stake designated as Point "C"; thence S 79° 30′ W 394.02 feet to an iron; thence S 79° 30′ W 326.17 feet to an iron; thence S 79° 30′ W 462.0 feet to a concrete monument; thence N 79° 30′ E 180.58 feet to an iron; thence N 78° 53′ E 712.93 feet to an iron, designated as Point "B"; thence N 78° 53′ E 15 feet to a stake, the point of BEGINNING.

AND

All that certain tract, piece, or parcel of land, containing 150 acres, situate, lying, and being about three (3) miles in a southerly direction from the courthouse of the County of Greensville, State of Virginia, and located in Hicksford Magisterial District of said county, being a portion of the "Junction Farm". LESS AND EXCEPT those portions conveyed therefrom by deeds of record in the Clerk's Office aforesaid.

As a matter of information, the said parcel is shown to contain 134.34 acres according to the Greensville County Tax Records.

The above described property is in all respects the residue of that conveyed to Richard W. Taylor by deed dated 4 January 1916 from Ella Anewalt, widower, of record in the Clerk's Office of the Circuit Court of Greensville County, Virginia, in Deed Book 33, at page 338.

AND

All that certain tract or parcel of land lying, being, and situate in Hicksford Magisterial District, Greensville County, containing 22.73 acres, and adjoining the lands of R. W. Taylor, T. J. Langford and others.

The above described property is in all respects the same as that conveyed to R. W. Taylor, a/k/a Richard W. Taylor, by deed dated 30 June 1923 from E. G. Moore and wife, of record in the Clerk's Office of the Circuit Court of Greensville County, Virginia, in Deed Book 38, at page 493.

AUTHORIZATION

The undersigned, as the owner of the real property described in Exhibit A attached hereto (the "Property"), hereby consents to the Property being included in that certain Greensville County, Virginia Special Use Permit Application (the "Application") to be submitted to Greensville County, Virginia by Greensville County Solar Project, LLC, a Delaware limited liability company (the "Company"), and hereby authorizes the Company to execute and submit the Application to the County, along with any other documents required in connection with the procedures set forth in the Zoning Ordinance, all as such owners authorized agent.

Dated: May 7, 2018

OWNERS:

Greensville Memorial Foundation

Bv:

EXHIBIT "A"

DESCRIPTION OF THE PROPERTY

THE FOLLOWING REAL PROPERTY LOCATED IN THE COUNTY OF GREENSVILLE, COMMONWEALTH OF VIRGINIA:

All those certain lots, pieces or parcels of land, lying and being in the Hicksford Magisterial District, Greensville County, Virginia, containing 342.48 acres, shown and designated as 1.26 acres, 103.32 acres, 134.90 acres and 103.00 acres, on Plat of Survey for Greensville Memorial Foundation, dated December 8, 2015, recorded in the Clerk's Office, Circuit Court of Greensville County, Virginia in Plat Book 15, page 209, to which plat reference is hereby made for a more particular description of the property hereby conveyed.

ATTACHMENT B

Greensville County Solar Project Conceptual Site Plan

PRELIMINARY - NOT FOR CONSTRUCTION



SOLAR PROJECT (80 MW) GREENSVILLE COUNTY



CONCEPTUAL SITE PLAN GREENSVILLE COUNTY, VIRGINIA



NVERTER SKID SECTIONS & DETAILS



MAY 3, 2018

PROJECT NO. 106913

MEDONNELL MEDONNELL

SECURITY FENCE -50,0' MIN 2.0' MIN 5.0° MIN CL ROCK BRIDGE ROAD OPEN SPACE (VARIES) COLLINS ROAD 40.0' MIN LANDSCAPE BUFFER (SEE NOTE 5) S' TALL FENCE WITH 1' BARBED WIRE EXTENSION 40.0 MIN, LANDSCAPE BUFFER (SEE NOTE 5) (VARIES) (VARIES) 40.0" MIN LANDSCAPE BUFFER (SEE NOTE 5) 320 W - 385 W PV MODULES DC CAPACITY: 101.6 MW AC CAPACITY: 80.0 MW DC:AC RATIO: 1.27 THIS LAYOUT IS CONCEPTUAL IN NATURE AND IS SUBJECT TO CHANGE DURING DETAILED DESIGN. STORM WATER MANAGEMENT BASIN, SEE NOTE 4 3) 20' WIDE GRAVEL ACCESS ROAD. SYSTEM INFORMATION: (1) SITE ENTRANCE GATE (2) 6" TALL CHAIN-LINK FENCE WITH 1" BARBED WIRE EXTENSION DIMENSIONS REFER TO DISTANCE BETWEEN SOLAR MODULE AND PROPERTY LINE. AS NECESSARY, VEGETATIVE BUFFER WILL BE INSTALLED ALONG ADJACENT ROAD RIGHT-OF-WAY ANY AREAS DISTURBED BY GRADING WILL BE RE-VEGETATED WITH NATIVE GRASS SEED MIX. MINOR GRADING PER DETAIL 3 ON SHEET CUP101. EXISTING GRADING AND DRAINAGE PATTERNS WILL BE PRESERVED. FINAL LOCATION AND SIZE OF STORMWATER FACILITIES AND BEST MANAGEMENT PRACTICES TO BE DETERMINED AT FINAL DESIGN. 20' MIN WIRE EXTENSION . 5.0° MIN no. date
A 04/27/18 C
B 05/03/18 C
C 05/03/18 C
D 05/12/18 C project 106 drawing APRIL 2 designed T. DO PRE

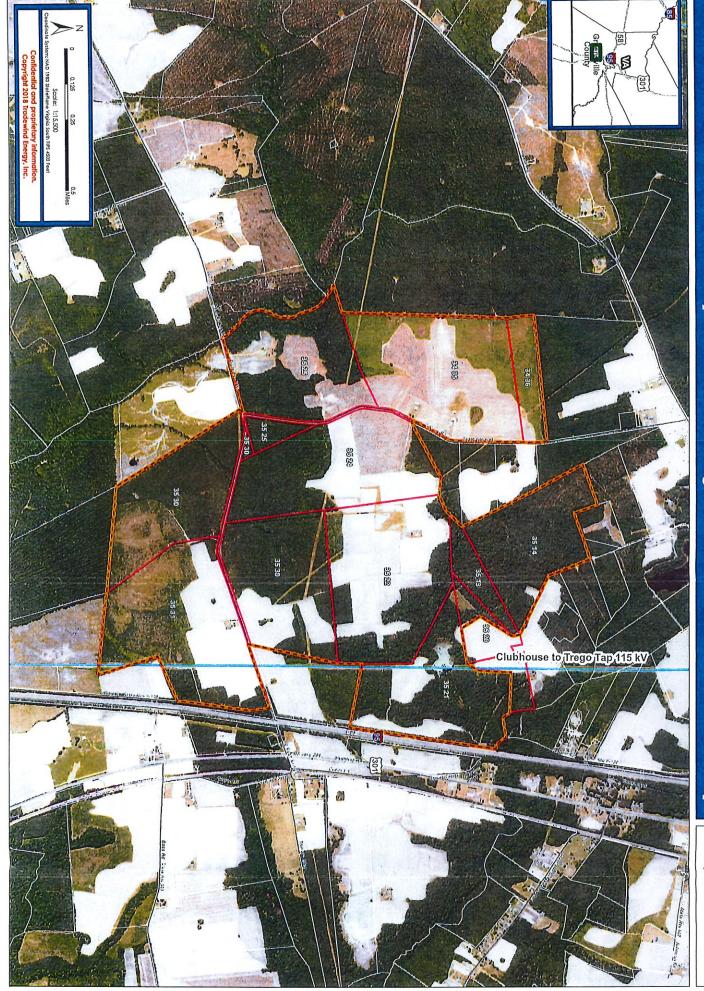
1850 N.

ATTACHMENT C

Greensville County Solar Project Tax Parcel Map

Greensville County Solar Project Tax Parcel Map



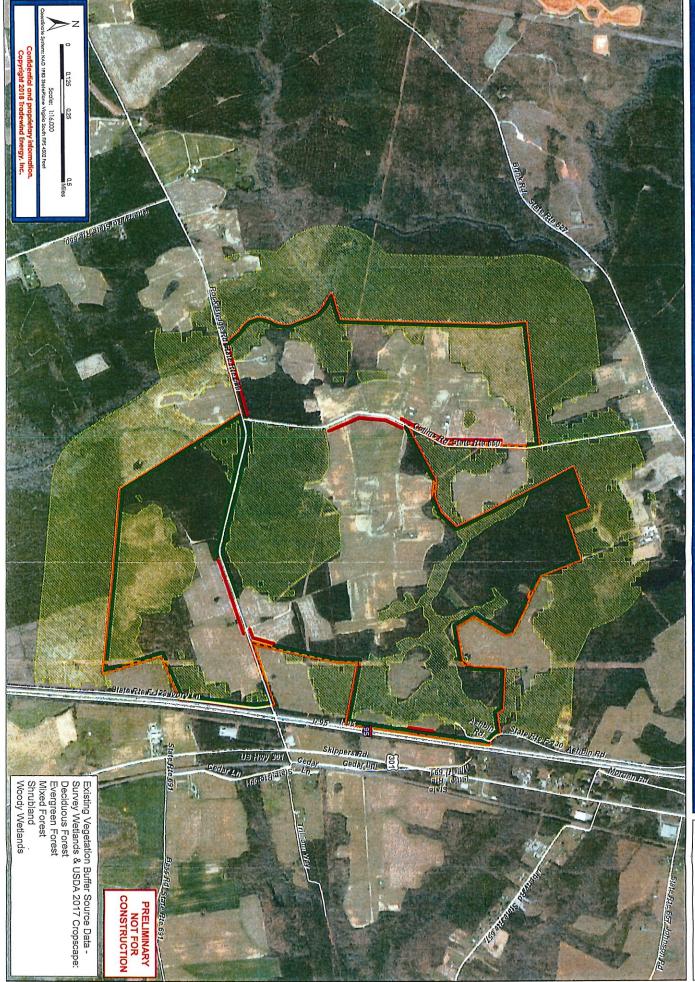


ATTACHMENT D

Greensville County Solar Project Timber Preservation Area

Greensville County Solar Project Timber Preservation Area

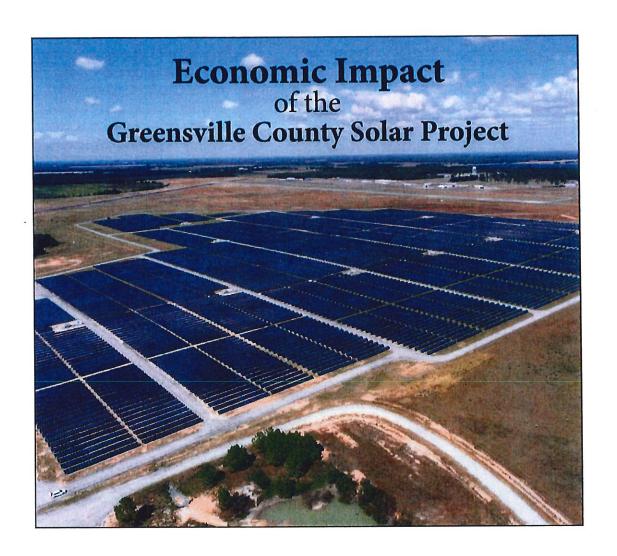




The following data that co U.S. Environmen U.S. De U.S. Fedd

ATTACHMENT E

Greensville County Solar Project Financial Impact Study



May 2018

Strategic Economic Research, ecc David G. Loomis, Ph.D. 2705 Kolby Court Bloomington, IL 6704 309-242-4690

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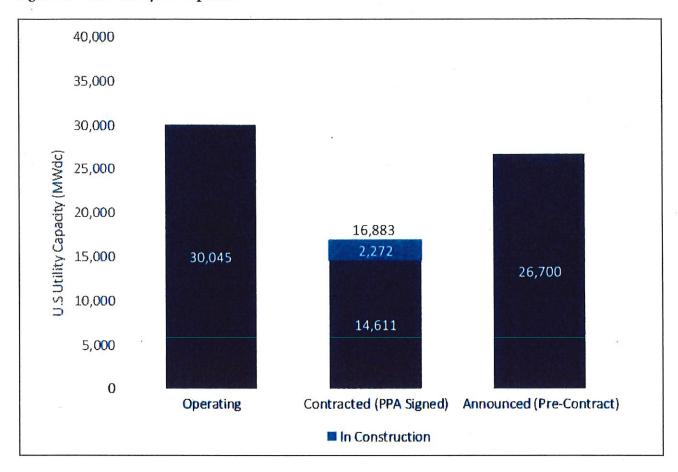
The U.S. solar industry is growing at a rapid but uneven pace. From 2013 to 2016, the amount of electricity generated from solar had more than doubled, increasing from 0.305 quadrillion Btu in 2013 to 0.624 quadrillion Btu in 2016 (EIA, 2018). The industry continued to add increasing numbers of PV systems to the grid. In 2016, the U.S. installed 15,128 MWdc of solar PV driven mostly by utility-scale PV. In 2017, the U.S. installed 10,608 MWdc of solar PV, a 30% decrease from 2016. Yet, as Figure 1 clearly shows, the capacity additions in 2017 still outpaced any previous year except the record-breaking 2016. The primary driver of this overall sharp pace of growth is large price declines. Since 2009, the price of solar PV has declined from about \$7.50/watt in 2009 to almost \$2.00/ watt in 2015 according to Figure 2. Solar PV also benefits from the Federal Investment Tax Credit (ITC) which provides 30% tax credit for residential and commercial properties. Still, various federal tax reform measures and new tariffs on imported solar panels by the Trump Administration may lessen the price declines in 2018 and beyond.

Utility-scale PV leads the installation growth in the U.S. A total of 6.2 GWdc of utility PV projects were completed in 2017 and accounted for 59% of the total installed capacity in 2017. An additional 2.0 GWdc are under construction and are expected to come online in 2018. According to Figure 4, there are 30,045 MWdc of utility-scale PV solar operating in the U.S. and an additional 16,883 MWdc has been contracted as well as another 26,700 MWdc announced.

II. Solar PV Industry Growth and Economic Development

a. U.S. Solar PV Industry Growth

Figure 3.—U.S. Utility PV Pipeline



Source: Solar Energy Industries Association, Solar Market Insight Report 2017

Virginia Annual Solar Installations 500 400 300 200 100 0 2016 2018E 2019E 2020E 2021E 2014 2015 2017E 2010 2011 2012 2013 Commercial Utility ■ Residential

Figure 5—Virginia Annual Solar Installations

Source: Solar Energy Industries Association, Solar Spotlight: Virginia

Utility-scale solar energy projects have numerous economic benefits. Solar installations create job opportunities in the local area during both the short-term construction phase and the long-term operational phase. In addition to the workers directly involved in the construction and maintenance of the solar energy project, numerous other jobs are supported through the indirect supply chain purchases and the higher spending that is induced by these workers. Solar projects strengthen the local tax base helping to improve county services, schools, police and fire departments and infrastructure improvements, such as public roads.

Numerous studies have quantified the economic benefits of Solar PV projects across the United States in peer-reviewed academic journals using the same methodology used in this report. Some of the studies examine smaller-scale solar systems while other studies analyze utility-scale solar energy. Croucher (2012) uses JEDI modeling methodology to find which state will receive the greatest economic impact from installing one hundred 2.5 kW systems which are smaller residential systems. He shows that Pennsylvania ranked first supporting 28.98 jobs during installation and 0.20 jobs during operations. Ohio ranked fourth supporting 31.32 jobs during construction and 0.03 jobs during operations.

c. Economic Benefits of Utility-Scale Solar PV Energy The proposed Greensville County Solar Project ("The Project") is located approximately two miles southwest of Emporia, Virginia, west of Interstate-95. The Project site includes approximately 1,000 acres of cultivated cropland and forestland of which approximately 800 acres will be developed as a solar energy facility. The Project has been under development since 2016.

Development activities have included multiple electrical transmission, environmental and engineering studies as well local, state and federal agency coordination. The Project is an up to 80 MW solar energy facility that will interconnect to the nearby Virginia Electric & Power Company Transmission system.

The Project is located in the A-1 Agricultural Zoning. In general, solar energy facilities include a ground-mounted solar array that will utilize photovoltaic solar modules and single-axis tracking technology, inverter stations, an operation and maintenance shed and perimeter fencing.

III. Greensville County Solar Project Description and Location

a. Greensville County Solar Project Description

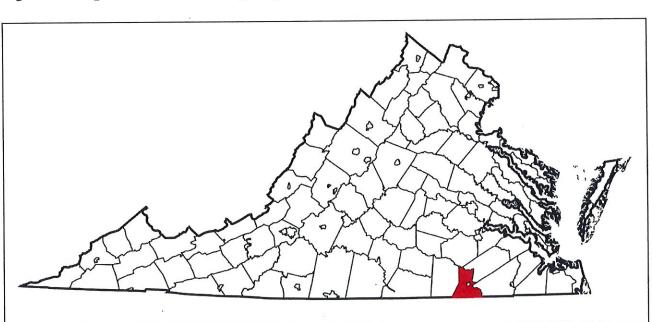


Figure 6.—Map of Greensville County, Virginia

Source: https://commons.wikimedia.org/wiki/File:Map_of_Virginia_highlighting_Greensville_County.svg, public domain

The economic analysis of solar PV project development presented here uses the National Renewable Energy Laboratory's latest Jobs and Economic Development Impacts (JEDI) PV Model (PV12.23.16). The JEDI PV Model is an input-output model that measures the spending patterns and location-specific economic structures that reflect expenditures supporting varying levels of employment, income, and output. That is, the JEDI Model takes into account that the output of one industry can be used as an input for another. For example, when a PV system is installed, there are both soft costs consisting of permitting, installation and customer acquisition costs, and hardware costs, of which the PV module is the largest component. The purchase of a module not only increases demand for manufactured components and raw materials, but also supports labor. When an installer/developer purchases a module from a manufacturing facility, the manufacturer uses some of that money to pay employees. The employees use a portion of their compensation to purchase goods and services within their community. Likewise, when a developer pays workers to install the systems, those workers spend money in the local economy that boosts economic activity and employment in other sectors. The goal of economic impact analysis is to quantify all of those reverberations throughout the economy.

The first JEDI Model was developed in 2002 to demonstrate the economic benefits associated with developing wind farms in the United States. Since then, JEDI models have been developed for biofuels, natural gas, coal, transmission lines and many other forms of energy. These models were created by Marshall Goldberg of MRG & Associates, under contract with NREL. The JEDI model utilizes state-specific industry multipliers obtained from IMPLAN (IMpact analysis for PLANning). IMPLAN software and data are managed and updated by the Minnesota IMPLAN Group, Inc., using data collected at federal, state, and local levels. This study analyzes the gross jobs that the new solar energy project development supports and does not analyze the potential loss of jobs due to declines in other forms of electric generation.

IV. Economic Impact Methodology



The economic impact results were derived from detailed project cost estimates supplied by Greensville County Solar Project. In addition, Greensville County Solar Project also estimated the percentages of project materials and labor that would be coming from within Greensville County and the State of Virginia.

Two separate JEDI models produced results to show the economic impact of the Project. The first JEDI model used the 2016 Greensville County multipliers from IMPLAN. The second JEDI model used the 2016 State of Virginia multipliers and the same project costs.

Tables 2-4 show the output from these models. Table 2 lists the total employment impact from the Greensville County Solar Project for Greensville County and the State of Virginia. Table 3 shows the impact on total earnings and Table 4 contains the impact on total output.

V. Economic Impact Results



Table 2.—Total Employment Impact from the Greensville County Project

	Greensville County Jobs	State of Virginia Jobs
Construction		
Project Development and Onsite Labor Impacts (direct)	225	306
Module and Supply Chain Impacts (indirect)	24	50
Induced Impacts	8	59
New Local Jobs During Construction	257	415
Operations (Annual)		
Onsite Labor Impacts (direct)	8.7	8.7
Local Revenue and Supply Chain Impacts (indirect)	0.6	1.3
Induced Impacts	0.3	1.3
New Local Long Term Jobs	9.6	11.3

Table 3.—Total Earnings Impact from the Greensville County Solar Project

•	Greensville County	State of Virginia
Construction		
Project Development and Onsite Earnings Impacts	\$14,525,668	\$20,157,491
Module and Supply Chain Impacts	\$865,052	\$2,763,878
Induced Impacts	\$270,213	\$3,072,881
New Local Earnings During Construction	\$15,660,933	\$25,994,250
Operations (Annual)		
Onsite Labor Impacts	\$305,376	\$305,376
Local Revenue and Supply Chain Impacts	\$26,574	\$83,666
Induced Impacts	\$8,576	\$69,594
New Local Long Term Earnings	\$340,527	\$458,636

Output refers to economic activity or the value of production in the state or local economy. It is an equivalent measure to the Gross Domestic Product, which measures output on a national basis. According to Table 4, the new local output during construction totals over \$19.6 million for Greensville County and over \$37.5 million for the State of Virginia. The new local long-term output totals almost \$435 thousand for Greensville County and over \$748 thousand for the State of Virginia.

Table 4.—Total Output Impact from the Greensville County Solar Project

	Greensville County	State of Virginia
Construction		
Project Development and Onsite Jobs Impacts on Outpu	t \$15,439,317	\$20,883,363
Module and Supply Chain Impacts	\$3,177,299	\$7,921,562
Induced Impacts	\$989,500	\$8,755,782
New Local Output During Construction	\$19,606,116	\$37,560,707
Operations (Annual)		
Onsite Labor Impacts	\$305,376	\$305,376
Local Revenue and Supply Chain Impacts	\$98,192	\$244,724
Induced Impacts	\$31,415	\$198,409
New Local Long-Term Output	\$434,983	\$748,509

Berkman, M., M. Tran, and W. Ahlgren. 2011. "Economic and Fiscal Impacts of the Desert Sunlight Solar Farm." Prepared for First Solar, Tempe, AZ (US).

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Chopra, Sunil and Peter Meindl. (2004). What is a Supply Chain?, Supply Chain Management.

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Jo J. H., Loomis, D.G., and Aldeman, M. R. (2013). Optimum penetration of utility-scale grid-connected solar photovoltaic systems in Illinois, Renewable Energy, 60, 20-26.

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Stone & Associates (2011). Overview of the Solar Energy Industry and Supply Chain, Prepared for the Blue Green Alliance, accessed on 12/13/13 at http://www.thecemc.org/body/Solar-Overview-for-BGA-Final-Jan-2011.pdf.

Toothman, Jessica, and Aldous, Scott. (2013). How Solar Cells Work, How Stuff Works, accessed on 10/28/2013 at http://science.howstuffworks.com/environmental/energy/solar-cell.htm.

VII. References

Experience (cont.)

2007-2017 Center for Renewable Energy, Normal, IL

Director

- Created founding document approved by the Illinois State University Board of Trustees and Illinois Board of Higher Education.
- Secured over \$150,000 in funding from private companies.
- Hired and supervised four professional staff members and supervised three faculty members as Associate Directors.
- Reviewed renewable energy manufacturing grant applications for Illinois Department of Commerce and Economic Opportunity for a \$30 million program.
- Created technical "Due Diligence" documents for the Illinois Finance Authority loan program for wind farm projects in Illinois.

2011-present Strategic Economic Research, LLC, Normal, IL President

- Performed economic impact analyses on policy initiatives and energy projects such as wind energy, solar energy, natural gas plants and transmission lines at the county and state level.
- Provided expert testimony before state legislative bodies, state public utility commissions, and county boards.
- Wrote telecommunications policy impact report comparing Illinois to other Midwestern states.

1997-2002 International Communications Forecasting Conference Chair

 Expanded Planning Committee with representatives from over 18 different international companies and delivered high quality conference attracting over 500 people over four years.

1985-1996 Business Research Bell Atlantic, Philadelphia, PA Economist

- Wrote and taught Applied Business Forecasting multimedia course.
- Developed and documented 25 econometric demand models that were used in regulatory filings.
- Provided statistical and analytic support to regulatory costing studies.
- Served as subject matter expert in switched and special access.
- Administered \$4 million budget including \$1.8 million consulting budget.



COUNTY OF GREENSVILLE

TO:

Greensville County Planning Commission Members

FROM:

Katherine Howerton, Program Administrator

SUBJECT:

Revision of Planning & Zoning Fees

DATE

July 31, 2018

The Greensville County Board of Supervisors authorized staff during their July 2, 2018 meeting, by resolution #19-04, to revise the planning and zoning fees collected by the county.

Staff recommends emulating Brunswick County's Planning and Zoning Fee schedule.

Staff also believes that Russell Slayton agrees with all Solar Energy Project fees stated. (Solar Energy Site Plan Fees and Solar Energy Special Use Permit Fee).

Therefore, staff recommends approval of the revised planning and zoning fees hereby attached.

KHH

GREENSVILLE COUNTY PLANNING ZONING FEES

	A	В	С
1			
2			
3	APPLICATION	CURRENT	PROPOSED
4	Zoning Map Amendment	\$300	\$350
5	Zoning Text Amendment	\$100	\$300
6			
7	Conditional/Special Use Permits	***************************************	
	Cellular Communications Towers (Co-		
8	locate below)	\$3,500	\$3,500
9	Solar Energy Project	\$300	\$75 per megawatt
10	Commercial/Industrial Use	\$300	\$300
11	Any Others Not Listed	\$250	\$300
12			
13	Appeals	\$175	\$300
14	Variances	\$200	\$300
15			
16	ADMINISTRATIVE APPROVALS		
	Cellular Communication Towers (Co-		
17	locate)	\$2,000	\$2,000
18	Home Occupation Permit	\$15	\$25
19	Sign Permit	\$15	\$35
20	Zoning Permit (with Building Permit)	\$15	\$25
21			T
22	SUBDIVISION PLANS		
23			
24	Boundary Survey Only		\$25.00
	Agricultural/Family Conveyance	\$10	\$25 + \$5 PER LOT
	All Others	\$15	\$25 + \$5 PER LOT
27	1-4 Lots	\$15	\$125 (1-20 LOTS)
	5+ Lots Preliminary	\$20 + \$1 per lot	\$123 (1-20 LO13)
 29	5+ Lots Final	\$10 + \$1 per lot	\$200 (20+ LOTS)
	Site Plan Review	\$100	\$150
	Planned Development	· · · · · · · · · · · · · · · · · · ·	
32	15.2-2232 Review	\$150 \$775A	\$150 + \$25 per lot
33	ZO.C.ZZZZ INGVIEW	\$775^	775^
	Solar Energy Project Site Plan	· · · · · · · · · · · · · · · · · · ·	- MATTER CONT.
	0-20 MW	6400	
	21-40 MW	\$100	\$100
	· · · · · · · · · · · · · · · · · · ·	\$100	\$200
	41-60 MW	\$100	\$300
_	61-80 MW	\$100	\$400
	81+ MW	\$100	\$500
10			
	Comprehensive Plan (Copy)	\$12	
	Comprehensive Plan Summary (Copy)	\$4	
	Zoning Ordinance (Copy)	\$7	
-	Notebook Cover	\$4	
	Subdivision Ordinance (Copy)	\$6	
16	Master Street Guide	\$10	
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